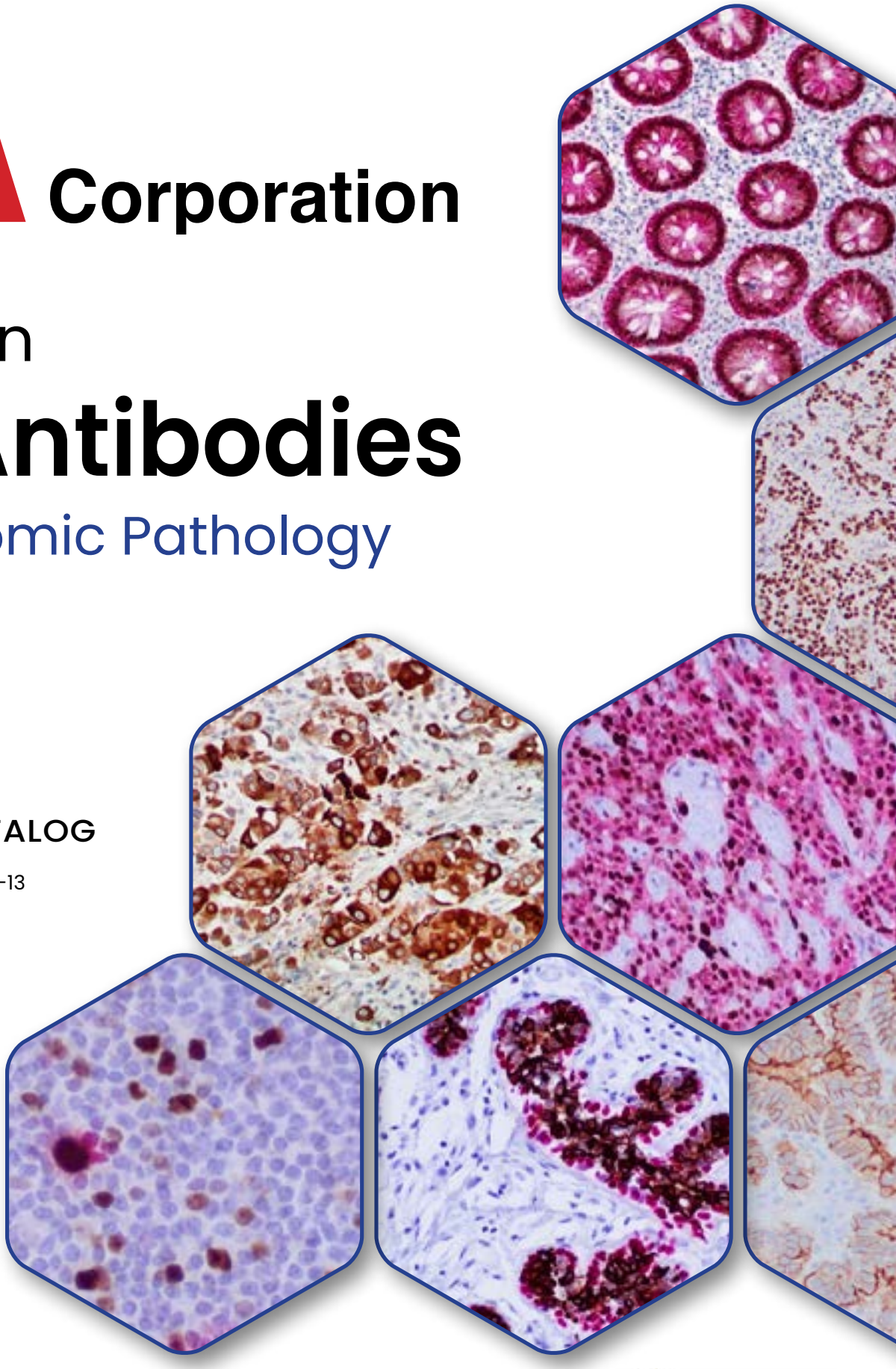
ZETA Corporation

Precision

IVD Antibodies

for Anatomic Pathology



2026-2027

PRODUCT CATALOG

zeta-corp.com

GMP and ISO-Certified Facilities

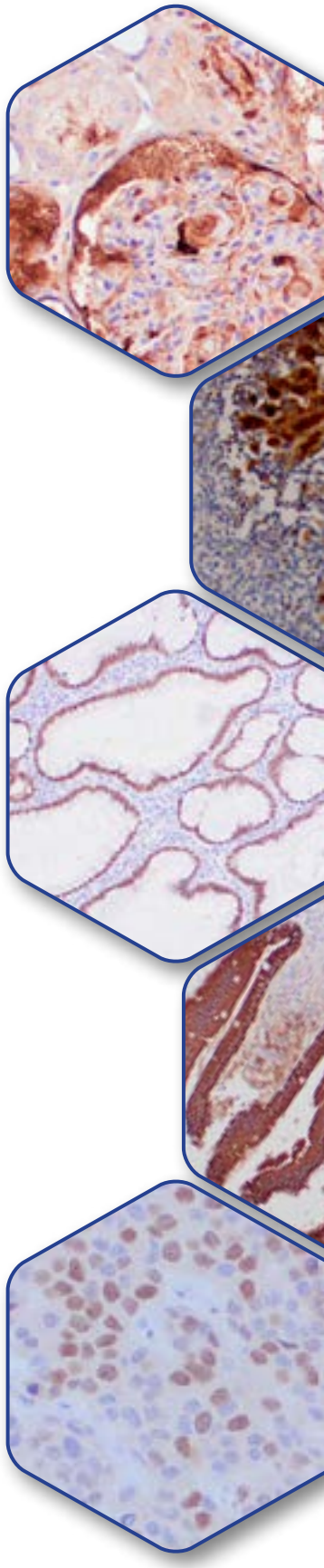
MDSAP Medical Device Single Audit Program

EU-IVDR

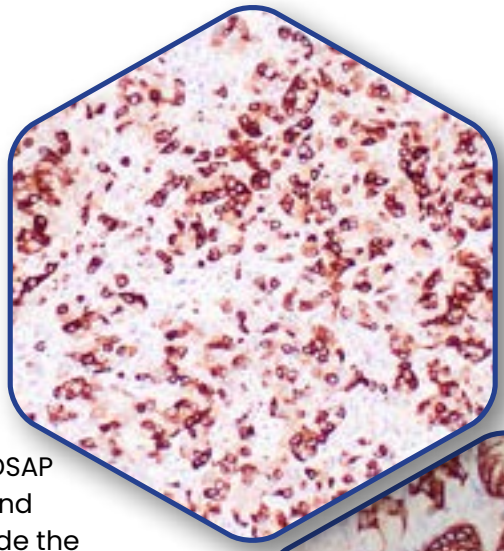
Our Mission

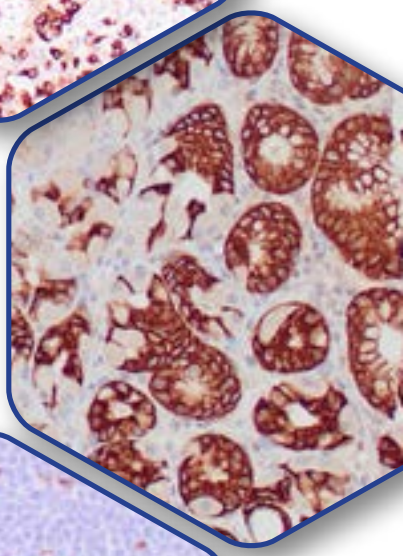
Provide the highest-quality IVD antibodies to support diagnostic evaluation, differential diagnosis, and clinical management of human diseases.

Table of Contents



Welcome to ZETA



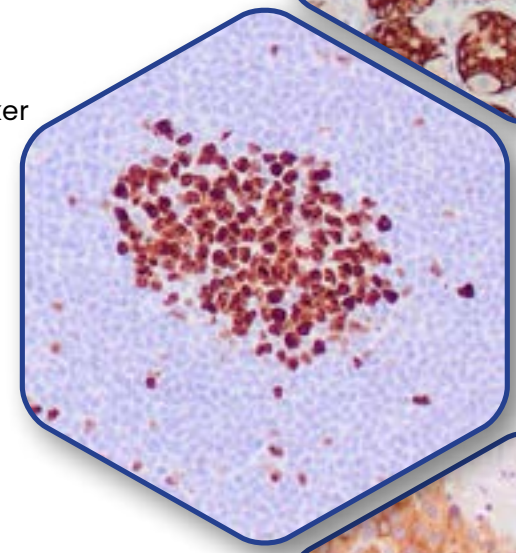


Precision IVD Antibodies

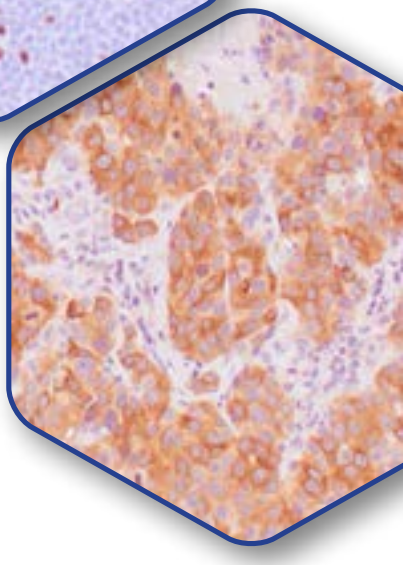
Zeta Corporation is an ISO 13485:2016, FDA, IVDR and MDSAP registered biomedical company that manufactures and distributes IVD antibodies for Pathology/IHC. We provide the highest quality of antibodies to help pathologists diagnose human tumors and diseases. Zeta antibodies are carefully curated to produce reproducible results on formalin-fixed, paraffin-embedded (FFPE) sections manually or using commercially available automated equipment. Zeta utilizes its collective knowledge of over 75 years to validate and standardize every antibody individually fo immunohistochemistry (IHC) application.

Innovation and Development

Zeta designs and develops tumor-specific biomarker usingcutting-edge technology to uniquely select immunogens for our famed RAbMono™ (Rabbit Monoclonal) and MonoMAb™ (Monospecific monoclonal) antibodies. Zeta's MonoMAb™ and RAbMono™ antibodies are produced through hybridoma and recombinant technologies.



We are proud of our commitment to producing highlyspecific, target-validated, and characterized IVD primary biomarkers to aid pathologists in the differential diagnosis of various tumors.



International Reach

We market the products directly in the US and distribute them to over 50 different countries globally through our trusted partners.

Zeta offers CE-IVD labeled products with European regulatory compliance and collaborates with distributors to register the products in the individual territories as needed. We also aid the clients and distributors with quality approvals through third-party QC bodies like the NordiQC, based in Denmark.

Ordering Information

To place an order from North America:

Phone US: (626) 355-2053
Fax US: (626) 836-9149
By mail: 605 E Huntington Dr; #204
Monrovia, CA 91016
USA
Email: sales@zeta-corp.com

Customers outside North America, please contact your local distributor.

See inside back cover for listings by country.

Requirements:

All orders should include the following:

- billing address and shipping address
- purchase order number
- caller's name and telephone number
- catalog # and description of each product
- quantity and package size of each product
- name, phone number and email of the principal user
- name, phone number, email and fax number of the customs broker and/or freight forwarder for US/Canadian orders, if required

Written confirmation of a telephone order is NOT required. If written confirmation of a telephone order is sent, however, it must be clearly marked "Confirming Order – Do Not Duplicate".

Prices:

For US and Canada, please call or email us for product pricing. Customers outside North America should contact their local distributor for pricing information.

Payment:

Company checks, wire transfers and credit cards are accepted.

Terms:

Credit terms are net 30 days. Shipping terms are FOB shipping point, pre-paid and added to the invoice.

Shipping:

All orders received by 2PM PT are routinely shipped the same day and delivered the following business day, except Friday, and deliver the following business day for most US and Canadian customers.

Returns:

No product will be accepted for return, credit or replacement without prior authorization obtainable from our customer service department. Return products are subject to a re-assay and stocking charge equal to 25% of the order value. No product may be returned for credit after 20 days from receipt of order.

Condition of Sale:

Nothing disclosed in this catalog is to be construed as a recommendation to use any of the described products in violation of any patents issued or pending. Zeta is not responsible for patent infringement which may occur with the use of these products. The product descriptions in this catalog are accurate to the best of our knowledge. Since applications of Zeta products are subjected to variable influences beyond our control, the products are offered without performance warranty, expressed or implied. Zeta will not be liable for any loss, damage, or expense which might result from the sale, storage, handling, use, or inability to use these products. Zeta guarantees that the products described in this catalog are consistent in all respects with the written descriptions contained herein and, furthermore, are consistent with the descriptions on certificates of analysis which are furnished with each product order. Changes and physical criteria of any product will be reflected in the current certificate of analysis for that product. If such changes are made, the certificate of analysis description will supersede that contained in this catalog. If any Zeta product fails to meet the physical criteria ascribed to it on its accompanying certificate of analysis, Zeta, after validating the deficiency, will, at the option of the customer, either replace the deficient product in kind or will issue a dollar credit equivalent to the purchase price of the deficient product.

Technical Support

To exceed your information needs, Zeta has dedicated Ph.D. technical service staff to offer solutions, explain additional product details, and offer specific product recommendations for immunohistochemistry (IHC on FFPE sections) application. To help our customers with troubleshooting assistance, will utilize all scientific resources to solve your inquiry. Our goal is to always provide timely same-day service to all inquiries. Please contact our technical service scientists by phone, fax or email.

Phone US: (626) 355-2053 Fax US: (626) 836-9149 Email: info@zeta-corp.com

Quality Assurance

Zeta provides the highest quality antibodies to help pathologists diagnose human diseases. We leverage over 75 years of our collective knowledge to validate and standardize every antibody offered.

All Zeta Corporation antibodies are rigorously evaluated and validated for immunohistochemistry on formalin-fixed, paraffin-embedded (FFPE) tissue sections to produce trusted and reproducible results - using manual methods or commercially available automated equipment.

ISO 13485:2016-Certified

We are an **ISO 13485:2016-certified** bio-medical company, and our antibody clones are scientifically selected to fit the need of clinical immunohistochemical laboratories. Our primary antibodies are manufactured in a FDA-registered and GMP facility and purified by affinity chromatography to >99% purity.


bsi.

Certificate of Registration

QUALITY MANAGEMENT SYSTEM - ISO 13485:2016

MDSAP-Certified

Recently, Zeta achieved **Medical Device Single Audit Program (MDSAP) certification**, reinforcing the Company's commitment to quality, regulatory compliance, and global market access.

MDSAP enables a single audit of a medical device manufacturer's quality management system to satisfy regulatory requirements in Canada, the United States, Australia, Brazil, and Japan. This achievement validates Zeta's robust quality management system and strengthens its ability to provide customers with high-quality diagnostic products that meet internationally recognized regulatory standards.


bsi.

Certificate of Registration

QUALITY MANAGEMENT SYSTEM - ISO 13485:2016

MDSAP

Quality Assurance

The **In Vitro Diagnostic Medical Devices Regulation (IVDR)** is the European Union's regulatory framework governing in vitro diagnostic medical devices. Introduced to strengthen patient safety, improve clinical evidence requirements, and enhance transparency, IVDR establishes more rigorous standards for product performance, quality, and post-market surveillance, helping ensure reliable diagnostic testing and greater confidence across healthcare systems throughout Europe.

IVDR-Certified

bsi.

EU Quality Management System Certificate

IVDR 820242 R000

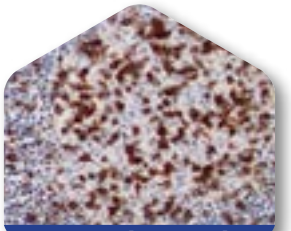
Zeta Corporation reached a major company milestone by obtaining IVDR certification for our immunohistochemistry (IHC) antibodies.

Our commitment to meeting the European Union's rigorous regulatory standards for quality, safety, performance, and technical documentation enables us to supply CE-marked IVD antibodies for clinical diagnostic use throughout Europe while providing pathology laboratories with greater confidence in product consistency, traceability, and regulatory compliance.

As healthcare providers continue to demand higher-quality diagnostic reagents, Zeta's expanding IVDR portfolio helps laboratories simplify regulatory requirements and supports accurate, reliable patient testing. This milestone represents an important step in Zeta's long-term growth strategy and reinforces the company's dedication to delivering innovative, high-quality IHC solutions that meet the evolving needs of customers across the European diagnostic market.

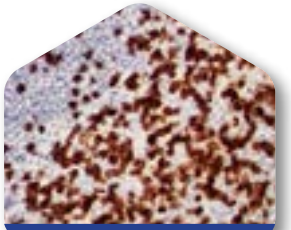
NEW!! Antibodies and Detection Kits

Hematopathology



ICOS (CD278)

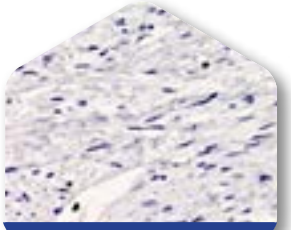
p.74



TRBC1

p.116

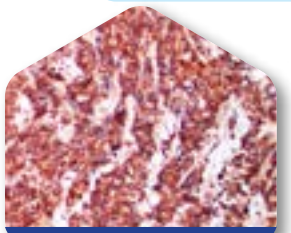
Soft Tissue Pathology



H3K27me3

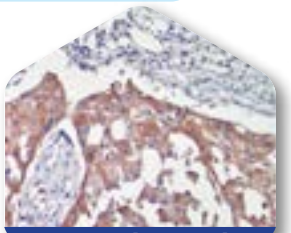
p.70

Lung/Mediastinum Pathology



DLL3

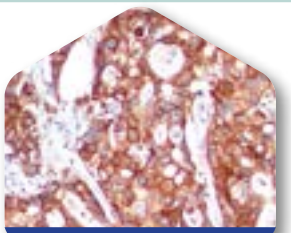
p.58



EGFR (L858R)

p.60

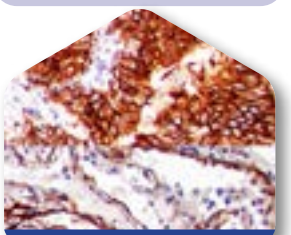
General & Epithelial Markers



c-Met

p.49

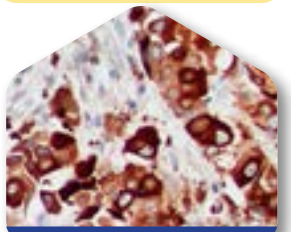
GI Pathology



Claudin 18.2

p.49

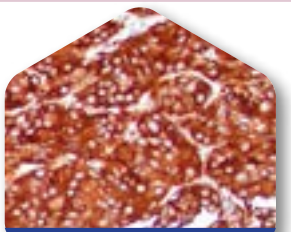
Urinary Pathology



Uroplakin II

p.119

Neuropathology/Endocrine



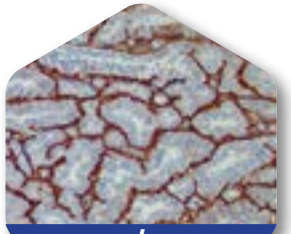
Tyr Hydroxylase

p.118

NEW ZETA MAX Detection Kits & Reagents

p.122

Breast/Gynocological Pathology

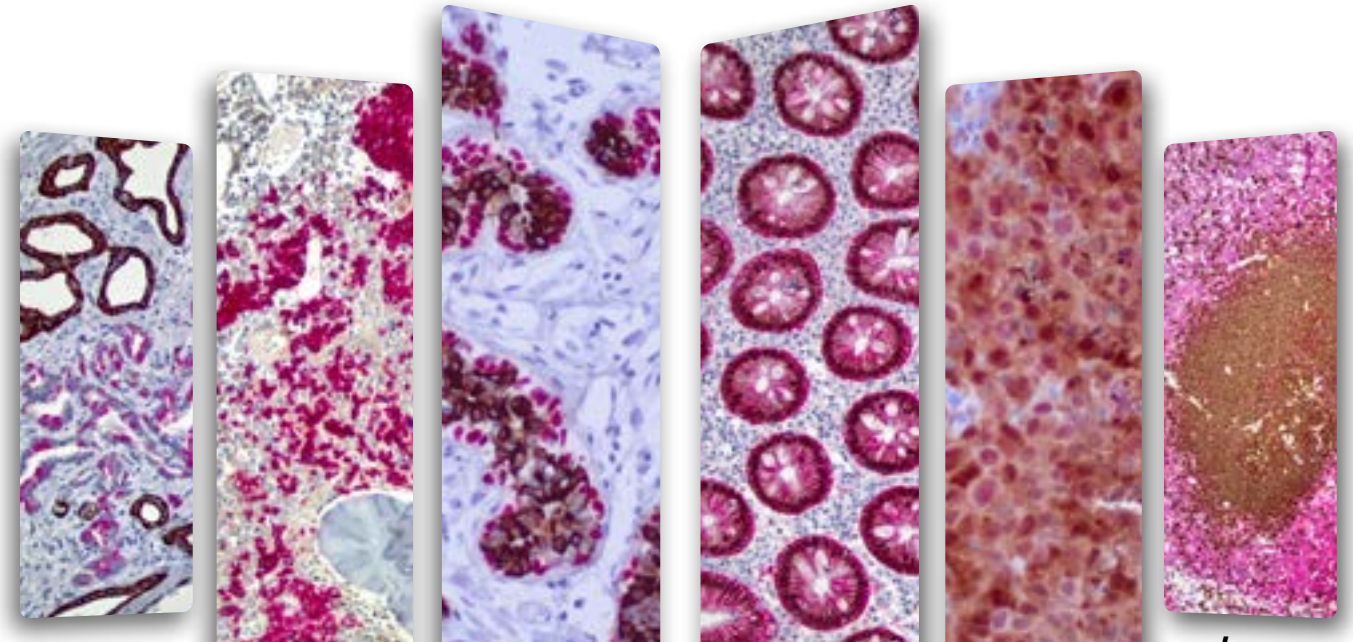


CA125/MUC16

p.27

Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

NEW!! Zeta DUALstain™ Antibody Cocktails



Prostate
p63
HMW CK
AMACR

Bone Marrow
CD33
CD71

Breast
CK8/18
p63

Colon
CDX-2
Cadherin-17

Melanoma
S-100
PRAME

T/B Cell
CD20
CD3

ZETA has introduced a new line of dual stain antibody cocktails, specifically designed to deliver more information than traditional single-color, single-antibody products.

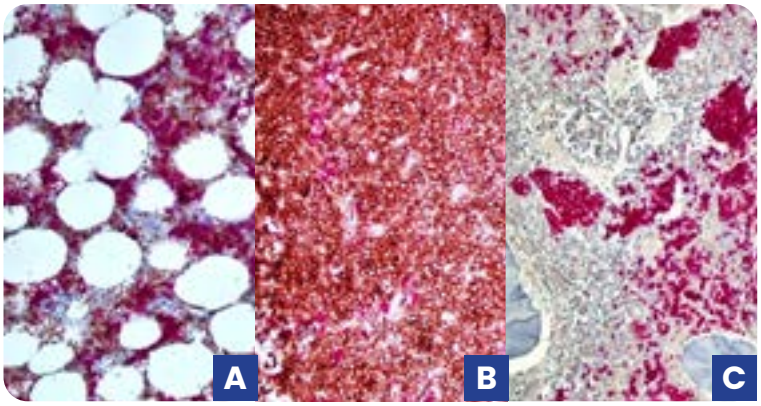
Our pathologists carefully curate useful antibody combinations and fine-tune their performance in the lab to work together with accuracy and precision. The use of two-color staining allows review of the specific expression identifiable to each antibody, providing a significant increase in information from one slide. Each dual stain cocktail provides the high quality that you have come to expect from Zeta combined with meaningful, diagnostically relevant information. All products come in our easy, Ready-To-Use format.

Bone Marrow Cocktail
(CD71 + CD33)

The combination of anti-CD33 (brown) and anti-CD71 (red) stain is useful to identify most blasts (myeloid and erythroid blasts) in bone marrow.

A cocktail of monoclonal antibodies for IHC including CD71 and CD33. CD33 is a glycosylated transmembrane protein. Acute myeloid leukemia, acute monocytic leukemia (AML-M5), and all cases of myeloid sarcoma are positive for CD33. The excellent sensitivity and specificity for myelomonocytic lineage makes **CD33 (mouse clone PSW44)** a useful diagnostic marker for myeloid sarcoma. **CD71 (rabbit clone ZR422)** is highly specific, and recognizes cell surface transferrin receptor (CD71). This receptor has been observed expressed by normal erythroid and erythroid leukemias.

Species: rabbit & mouse monoclonals **Cat#: Z2841** ›››



IHC: normal human bone marrow **(A)**, myeloid leukemia **(B)**, and bone marrow erythroid hyperplasia **(C)** stained with Bone Marrow Cocktail antibodies using DAB-conjugate anti-mouse (CD33) and AP-conjugated anti-rabbit (CD71). Note the myeloid cells are positive for CD33 (brown) and erythroid cells are positive for CD71 (red).

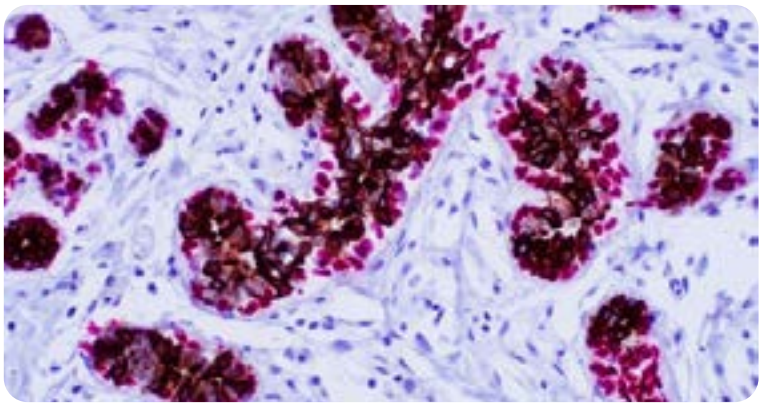
Continued on pages 10-13 ...

Breast Cocktail
(p63 + CK8/18)

The combination of p63 (red) and CK8/18 (brown) immunohistochemical stain is used to identify breast invasive ductal and lobular carcinoma (CK8/18 positive, P63 negative) against normal breast tissue or in situ breast carcinoma (CK8/18 positive, P63 positive).

p63 is a homolog of the tumor suppressor p53 identified in basal cells in the epithelial layers of a variety of tissues including breast and prostate. Cytokeratin 8 (CK8) belongs to the type II subfamily of high MW CKs and exists in combination with CK18. **p63 (rabbit clone ZR439)** was detected in nuclei of the basal epithelium in normal breast tissue. Cytokeratin **CK8/18 (mouse clone B22.1/B23.1)** recognizes all simple epithelia including glandular epithelium i.e. thyroid, breast, gastrointestinal tract etc.

Species: rabbit & mouse monoclonals **Cat#: Z2833** ›››



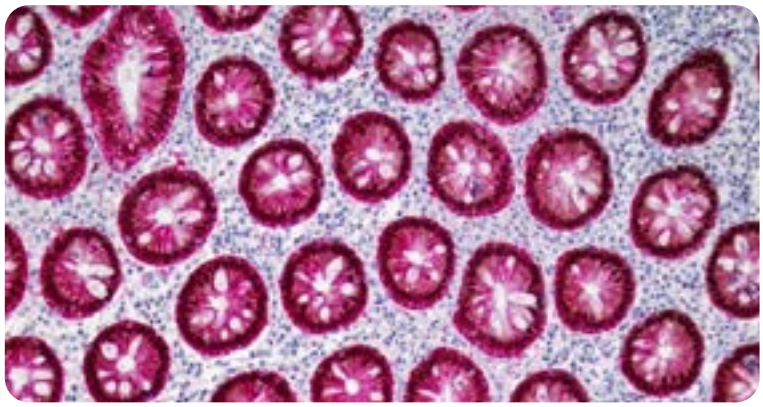
IHC: Human normal breast stained with Breast Cocktail Antibodies using DAB-conjugate anti-mouse (CK8/18) and AP-conjugated anti-rabbit (p63). Note the luminal cells are positive for CK8/18 (brown) and myoepithelial cells are positive for P63 (red)

Colon Cocktail
(Cadherin 17 + CDX-2)

Combination AP-labeled cadherin 17 (red) and HRP-labeled CDX-2 (brown) paraffin immunohistochemistry is highly sensitive and can indicate colorectal and stomach adenocarcinoma.

These recombinant rabbit antibodies recognize **Cadherin 17 (rabbit clone ZR418)** and **CDX-2 (mouse clone ZM20)**, are novel diagnostic markers for GI adenocarcinoma. Cadherin 17 (CDH17) is involved in tumor invasion and metastasis and a highly specific marker in colon cancer. CDX-2 is a homeobox gene that encodes an intestine-specific transcription factor. Anti-CDX-2 has been useful to establish GI origin of metastatic adenocarcinomas and carcinoids and is useful to distinguish metastatic colorectal adenocarcinoma from lung adenocarcinoma.

Species: rabbit & mouse monoclonals **Cat#: Z2840** ›››



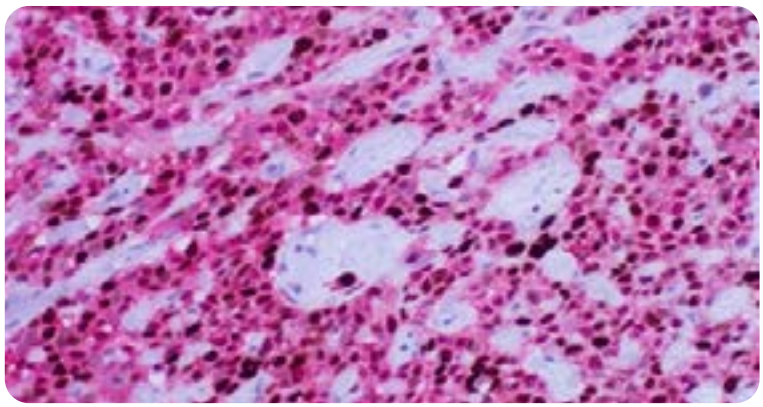
IHC: Human colon stained with Colon Cocktail Antibodies using DAB-conjugate anti-mouse (CDX-2) and AP-conjugated anti-rabbit (cadherin 17). The crypt cells are nuclear positive for CDX-2 (brown) and cytoplasmic positive for cadherin 17 (red)

HPV-Infected Tumor Cocktail
(p16INK4 + Ki-67)

A cocktail to identify tumor cells co-expressing both tumor suppression marker P16 (red) and cell proliferation marker Ki-67 (brown) in HPV infected tumors, such as high-grade dysplasia and carcinomas.

This cocktail contains **p16*INK4a* (rabbit clone ZR407)** and **Ki-67 (mouse clone ZM67)** that both recognize HPV. p16*INK4a* is a tumor suppressor protein involved in the pathogenesis of a variety of malignancies. Tumors infected with HPV, particularly the high-risk strains, express high level of P16 protein. The Ki-67 nuclear antigen is associated with cell proliferation. It is found throughout the cell cycle in the G1, S, G2, and M phases; but not the (G0) phase, and used to grade proliferation rates of tumors.

Species: rabbit & mouse monoclonals **Cat#: Z2835** ›››



IHC: Human cervical HPV-associated squamous cell carcinoma (SCC) stained with HPV Infection Cocktail Antibodies using DAB-conjugate anti-mouse (Ki-67) and AP-conjugated anti-rabbit (P16). Note the SCC is strongly positive for P16 (red) with a high Ki-67 index (~50%) (brown)

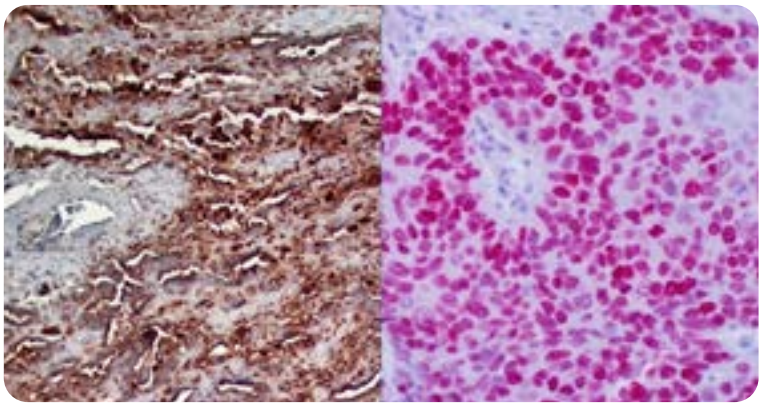
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

Lung Cocktail
(P40 + Napsin A)

The high specificity expression of Napsin A (brown) in lung adenocarcinomas is useful to distinguish primary lung adenocarcinomas from lung squamous cell carcinoma (P40 positive, red) and adenocarcinomas of other organs.

P40 (rabbit clone ZR8) and **Napsin A (mouse clone ZM11),** are standard IHC markers used to diagnose and subtype non-small cell lung cancer (NSCLC). p63 consists of two major isoforms-TAp63 and DNp63. DNp63 isoform (identified by anti-p40) contains an alternative transcriptionally inactive domain. ZR8 recognizes DNp63 but not TAp63. p40 reacts with squamous cell carcinomas but not with adenocarcinomas. Napsin is a pepsin-like aspartic proteinase consisting of Napsin A and Napsin B. Napsin A is expressed in type II pneumocytes and in lung adenocarcinomas.

Species: rabbit & mouse monoclonals **Cat#: Z2835 ›››**



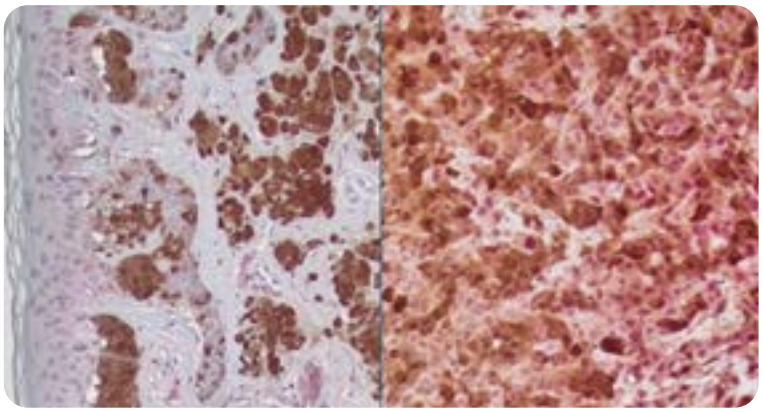
IHC: Human lung adenocarcinoma (left) and lung squamous cell carcinoma (right) stained Lung Cocktail antibodies with DAB-conjugate anti-mouse (napsin A) and AP-conjugated anti-rabbit (P40). Note the adenocarcinoma is only positive for Napsin A (brown) whereas the squamous cell carcinoma is only positive for p40 (red).

Melanoma Cocktail
(PRAME + S-100)

The combination of PRAME (red) and S-100 (brown) IHC staining can aid in differentiating malignant melanoma and atypical nevus (PRAME positive, S-100 positive) from benign nevus (PRAME negative, S-100 positive).

PRAME is a transcriptional repressor that prevents retinoic acid-induced cell proliferation arrest, differentiation, and apoptosis. This gene encodes an antigen (used to produce Zeta anti-PRAME, **rabbit clone ZR383**) that is preferentially expressed in human melanomas and is recognized by cytolytic T lymphocytes. Not expressed in normal tissues, except testis. S-100 is a calcium binding protein expressed in melanocytes and the antigen presenting cells. S-100 **(mouse clone 4C4.9)** stains Schwannomas, ependymomas, astrogliomas, almost all benign and malignant melanomas and their metastases.

Species: rabbit & mouse monoclonals **Cat#: Z2838 ›››**



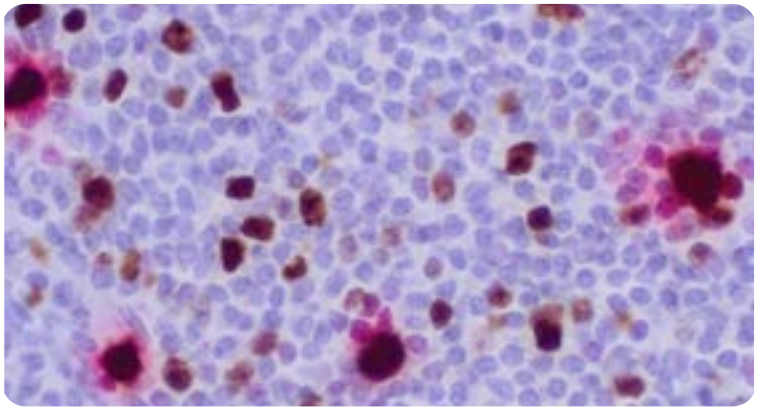
IHC: Human compound nevus (left) and malignant melanoma (right) stained with Melanoma Cocktail using DAB-conjugate anti-mouse (S-100) and AP-conjugated anti-rabbit (PRAME). Note the nevus cells are only positive for S-100 (brown) and negative for PRAME, whereas melanoma cells are positive for both PRAME (nuclear, red) and S-100 (nuclear and cytoplasmic, brown)

Proliferation Cocktail
(PHH3 + Ki-67)

The combination of PHH3 (red) and Ki-67 (brown) immunohistochemical staining can help evaluate tumor grade (neuroendocrine tumor), and malignancy (uterine smooth muscle tumors, CNS tumors, GIST, melanocytic tumors).

Phosphohistone H3 (PHH3) is a mitotic marker. Serine 10 of Histone H3 is phosphorylated in association with mitotic chromatin condensation in late G2 and M phase of the cell cycle and thus, PHH3 **(rabbit clone ZR285)** can distinguish mitosis from apoptotic nuclei. High levels of PHH3 is associated with increased mitotic count and with high Ki-67 expression. Ki-67 antigen is a nuclear, non-histone protein that is present in all stages of the cell cycle except G0. This characteristic makes Ki-67 **(mouse clone ZM67)** an excellent marker for proliferating cells.

Species: rabbit & mouse monoclonals **Cat#: Z2834 ›››**



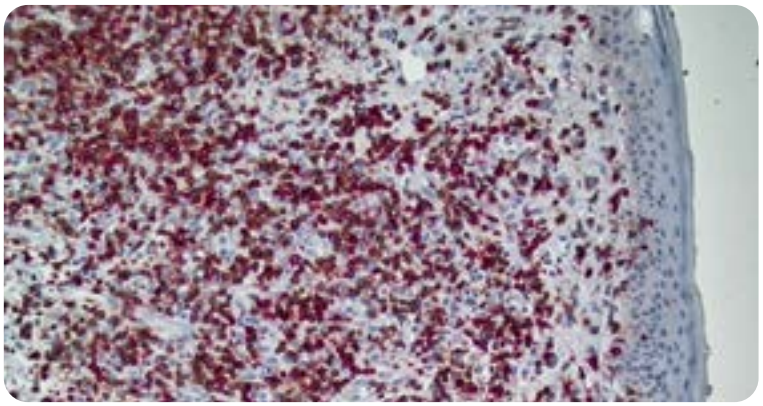
IHC: Human tonsil stained with Proliferation Cocktail Antibodies using DAB-conjugate anti-mouse (Ki-67) and AP-conjugated anti-rabbit (PHH3). Note the four mitotic cells are positive for both Ki-67 (brown) and PHH3 (red) and proliferative cells are positive for Ki-67 (brown).

T Cell Clonality Cocktail
(TRBC1 + CD3)

The combination of CD3 and TRBC1 antibodies can be used to determine T cell clonality by paraffin immunohistochemistry. The staining CD3/TRBC1 patterns: normal lymphoid tissue: mixed CD3 (brown) and TRBC1 (red), ratio 2:1; monoclonal T cell population: mixed CD3 (brown) and TRBC1 (red), ratio 1:1, or only brown with no red staining

Antibodies to **CD3** (**mouse clone ZM45)** and **TRBC1** (**rabbit clone ZR481)** stain human T cells in both the cortex and medulla of the thymus and in peripheral lymphoid tissues and is suitable for staining normal and neoplastic T cells. TRBC1 refers to T-Cell Receptor Beta Constant 1. Malignant lymphomas and leukemias often show restricted expression of TRBC1 or TRBC2, rather than normal mixed making CD3 and TRBC1 antibodies useful in clonality assessment.

Species: rabbit & mouse monoclonals **Cat#: Z2854** ›››



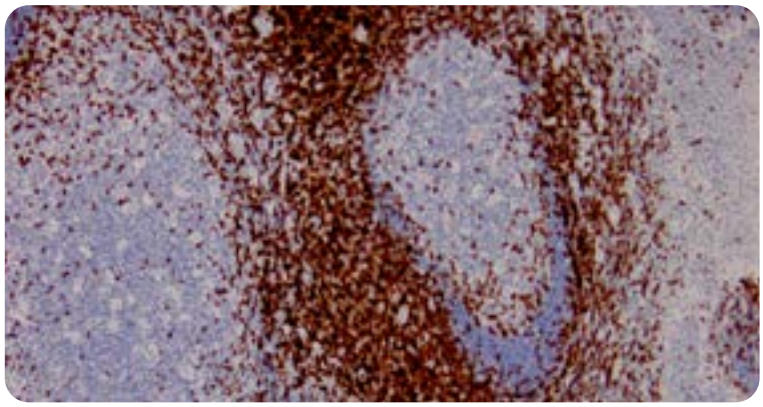
IHC: Human mycosis fungoides stained with T Cell Clonality cocktail antibodies using DAB-conjugate anti-mouse (CD3) and AP-conjugated anti-rabbit (TRBC1). Note the monoclonal T cells are positive for both CD3 (brown) and TRBC1 (red).

T/B Cell Cocktail
(CD3 + CD20)

The combination of CD3 (red) and CD20 (brown) antibodies allow B-cell and T-cell lymphocytes to be identified on the same slide.

Anti-**CD3 (rabbit clone ZR414)** recognizes the epsilon chain of CD3, which consists of five different polypeptide chains (designated as gamma, delta, epsilon, zeta, and eta). The CD3 antigen is a highly specific marker for T cells and has been reported expressed by most T cell neoplasms. CD20 is a non-Ig differentiation antigen of B cells and the expression of CD20 is restricted to normal and neoplastic B cells, being absent from all other leukocytes and tissues. **CD20 (mouse clone L26)** is the most specific B-cell marker used in paraffin immunohistochemistry.

Species: rabbit & mouse monoclonals **Cat#: Z2840** ›››



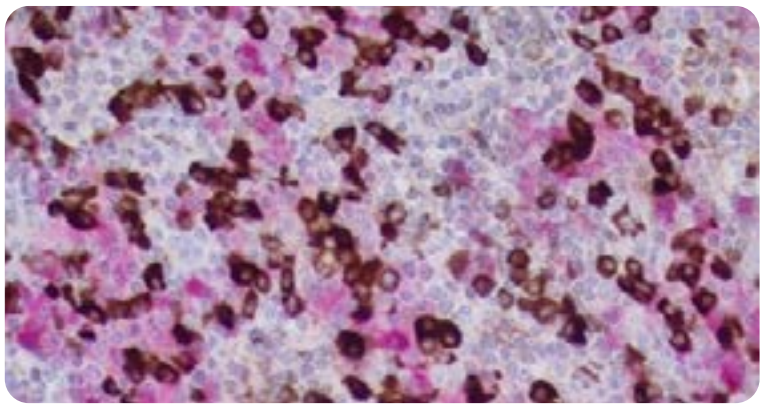
IHC: Human lymph node stained with T/B Cell Cocktail Antibodies using DAB-conjugate anti-mouse (CD20) and AP-conjugated anti-rabbit (CD3). Note the follicular B cells are positive for CD20 (brown) and perifollicular T cells are positive for CD3 (red).

B Cell Clonality Cocktail
(Kappa + Lambda)

The cocktail can help establish B cell/plasma cell clonality where AP-labeled kappa (red) and HRP-labeled lambda antibodies (brown) are visualized through paraffin immunohistochemistry on a single slide.

B cells are a type of white blood cell that produce antibodies. Clonality refers to the process where a single B cell undergoes division to produce a population of identical cells which secrete monoclonal Ig with either kappa or lambda light chains. Antibodies are used to determine the ratio of **kappa (rabbit clone ZR472)** to **lambda (mouse clone LcN2)** light chains. In normal lymphoid tissue, the kappa and lambda cell ratio is approximately 0.3-1.7. In the hematological diseases, such as B-cell lymphomas or B-cell leukemias, there is presence of abnormal monoclonal B cell population with either kappa light chain (>1.7) or lambda light chain (<0.3) predominance.

Species: rabbit & mouse monoclonals **Cat#: Z2837** ›››



IHC: Human lymph node stained with B Cell Clonality Cocktail using DAB-conjugate anti-mouse (lambda) and AP-conjugated anti-rabbit (kappa). Note the polyclonal plasma cells are positive for kappa light chain (red) and lambda light chain (brown).

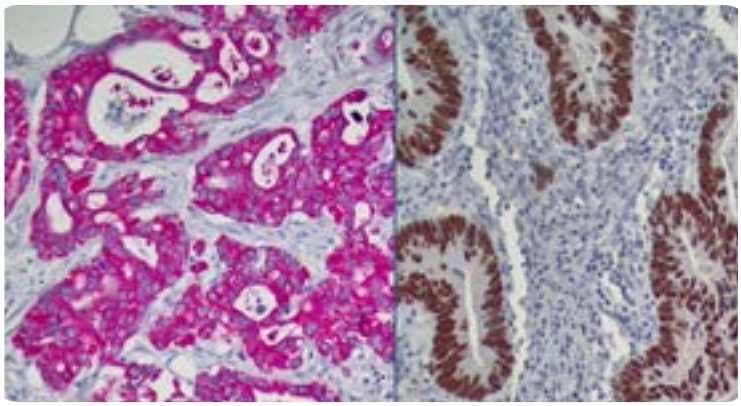
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

Unknown Primary Cocktail
(UPC, CK2 + CDX-2)

The combination of CK7 (red) and CDX-2 (brown) antibodies can separate unknown primary carcinomas (UNC) as CK7+/CDX-2- (breast, GYN, lung) CK7+/CDX-2+ (bladder, stomach, appendix, ovarian mucinous carcinoma), CK7-/CDX-2+ (colorectal), or CK7-/CDX-2- (prostate, kidney).

Cytokeratin 7 is found in glandular and transitional epithelia but not in the stratified squamous epithelia. It's expressed in epithelial cells of ovary, lung, and breast but not of colon, prostate, or GI tract. Anti-CK7 **(rabbit clone ZR428)** can distinguish ovarian carcinomas (CK7+) from colon carcinomas (CK7-). CDX-2 is expressed in GI organs and GI carcinomas. Anti-CDX-2 **(mouse clone ZM20)** can establish GI origin of metastatic adenocarcinomas and carcinoids and distinguishes metastatic colorectal adenocarcinoma from lung adenocarcinoma.

Species: rabbit & mouse monoclonals **Cat#: Z2856** ›››



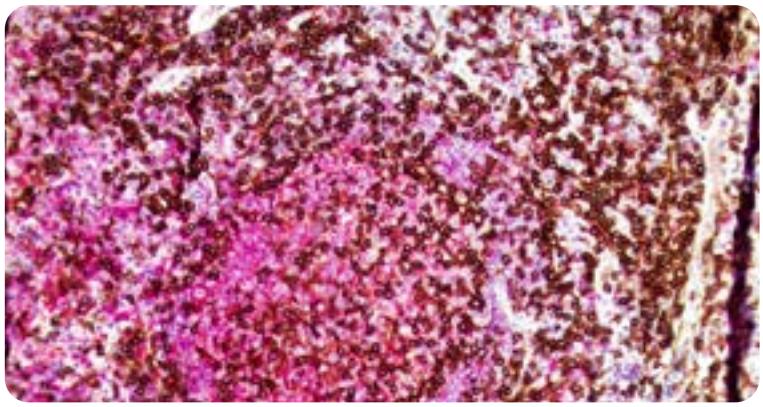
IHC: Human metastatic pancreatic ductal carcinoma (left) and metastatic colon adenocarcinoma (right) stained with UPC Antibodies using DAB-conjugate anti-mouse (CDX-2) and AP-conjugated anti-rabbit (CK7). Note the pancreatic ductal carcinoma is CK7+/CDX-2, whereas the colon adenocarcinoma is CK7+/CDX-2-.

T Cell Cocktail
(CD4 + CD8)

The combination of CD4 (brown) and CD8 (red) is helpful in distinguishing mycosis fungoides (CD4+). Multiplex IHC may also give distinct advantages if ratios and/or cell counts on a single slide are desired.

This cocktail recognizes both CD4 **(mouse clone ZM180)** and CD8 **(rabbit clone ZR286)** to help identify T-cell subpopulations and provides visualization of the immune cell composition within the tissue microenvironment by enabling two chromogen detection on one slide. In cancer prognosis, the T-Cell Cocktail can provide predictive immune response information; in autoimmune and inflammation, it can characterize the infiltrate type (CD4 versus CD8 dominant); and in transplant monitoring, it can detect rejection or graft-versus-host disease (GVHD).

Species: rabbit & mouse monoclonals **Cat#: Z2842** ›››



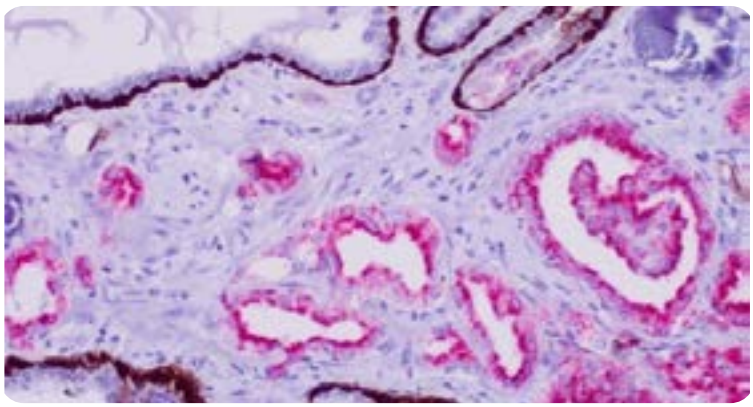
IHC: Human tonsil stained with T Cell Cocktail Antibodies using DAB-conjugate anti-mouse CD4 (clone ZM180) and AP-conjugated anti-rabbit CD8 (clone ZR286). Note the perifollicular T cells are either positive for CD4 (brown) or CD8 (red).

Prostate Cocktail
(AMACR + p63 + CK-HMW)

The combination of AMACR (brown) and p63 (red) may be extremely useful for diagnosing prostate intraepithelial neoplasia (PIN) and small focus adenocarcinoma, especially in difficult cases and cases with limited tissues. AMACR stains cytoplasm in prostate adenocarcinoma and PIN while p63 stains basal cell nuclei in PIN and benign prostate gland.

A cocktail with AMACR **(rabbit clone 13H4)**, p63 **(mouse clone 4A4)**, and CK-HMW **(mouse clone 34βE12)**. AMACR is an essential enzyme in the β-oxidation of branched-chain fatty acids. High expression of AMACR protein is found in prostate adenocarcinoma but not in benign prostate tissue by immunohistochemical staining in paraffin-embedded tissue. The expression of AMACR is also detected in prostate premalignant lesions, such as prostate intraepithelial neoplasia (PIN).

Species: rabbit & mouse monoclonals **Cat#: Z2836** ›››



IHC: Prostate adenocarcinoma stained with Prostate Cocktail using DAB-conjugate anti-mouse (HMW CK & p63) and AP-conjugated anti-rabbit (AMACR). Note the benign glands (top and bottom) are p63+/HMW CK34βE12+/AMACR- whereas adenocarcinoma (center) is p63-/HMW CK34βE12-/AMACR+.

RAbMono™ *Rabbit Monoclonal Antibodies*

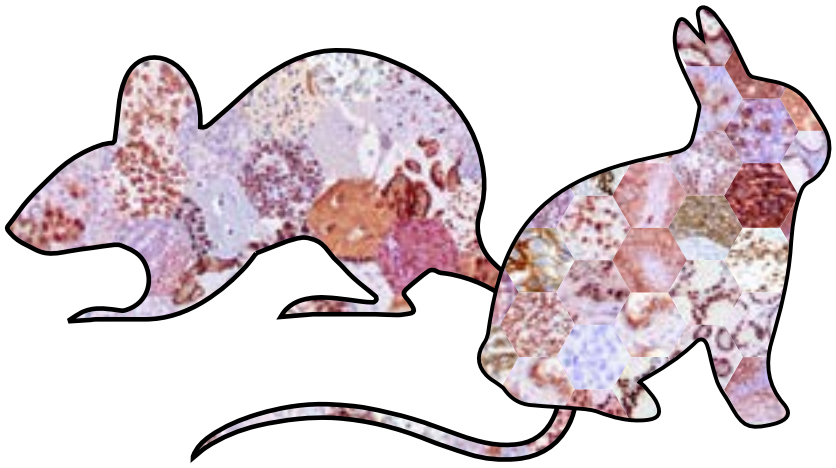
Superior specificity, low background and high affinity.

RAb**M**ono rabbit monclonals designed and developed at Zeta are uniquely produced and target-validated for IHC on FFPE tissue sections. In contrast to typical mouse monoclonal technology, Zeta has achieved a unique and effective rabbit monoclonal production platform based on our unmatched expertise in the field.

Generally, Rabbit Monoclonals are characterized by 10 to 100 times higher affinity than Mouse Monoclonals. The rabbit's immune system is better equipped to generate a response to smaller antigens that are not detected in mice. As a result, Rabbit Monoclonals are becoming increasingly popular in immunohistochemical detection of tumor markers in humans.

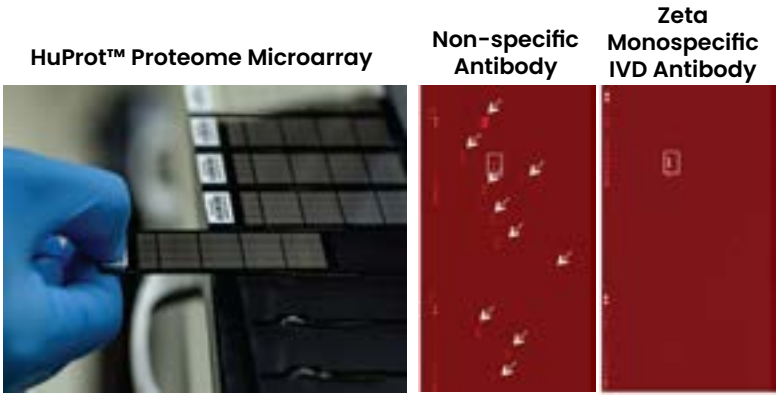
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

MonoMAb™ *Mouse and Rabbit Monospecific Monoclonal Antibodies*



Zeta's monospecific monoclonal antibodies are produced by traditional hybridoma technologies. Clones are initially assessed by ELISA and gel electrophoresis, then subsequently specifity-tested by immunohistochemsitry on FFPE sections.

Quality assurance taken to the next level
Only the clones that excel on FFPE sections are selected for HuProt™ high-throughput human proteome microarray analysis. The antibodies are incubated with glass slides containing over 21,000 immobilized full-length human proteins. The microarrays are scanned, protein binding analyzed with GenePix Pro Image Analysis Software and cross-reactivity determined.



Which antibody would you trust in your clinical immunohistochemical laboratory?

Zeta Corporation's current portfolio: 400+ antibodies listed for Anatomic Pathology

- Breast/Gynocological Pathology
- Dermatopathology
- General & Epithelial Markers
- GI Pathology
- Hemopathology
- Infectious Markers
- Lung/Mediastinum Pathology
- Neuropathology/ Endocrine
- Soft Tissue Pathology
- Transplantation Pathology
- Urinary Pathology
- Vascular Markers

Breast/Gynocological Pathology	Clone	Page
BRCA-1	ZR455	25
BRG1/SMARCA4	ZR390	26
CA125 / MUC16	ZM53	27
CA125 / MUC16 ***NEW!!***	ZR485	27
Cytokeratin 14	LL002	55
Cytokeratin 14	ZM372	55
E-Cadherin	ZM63	59
E-Cadherin	ZR375	60
ER	ZR147	62
ER	ZM319	62
FOLR1 ***NEW!!***	ZR480	64
GATA-3	ZR358	66
GATA-3	L50-823	66
GCDFP-15	ZM23	66
HCG	ZR362	71
Her-2 Neu	ZR218	72
Her-2 Neu	ZR5	72
Ki-67	MIB-1	78
Ki-67	ZR433	78
Ki-67	ZM67	79
Mammaglobin	31-A5	80
Mammaglobin	304-1A5	81
Mammaglobin	ZR363	81
Mammaglobin Cocktail	304-1A5+31-A5	81
p120	ZR316	98
p16INK4	G175-405	94
p16INK4	ZR407	94
p16INK4	JC2	95
p57Kip2	KP10	96
p57Kip2	ZR230	97
PLAP	ZR441	102
PLAP	ZM161	103
Podoplanin	D2-40	103
Podoplanin	ZR442	103
PR	ZR290	104
PR	ZR4	104
Stathmin	ZR398	111
TRPS1	ZR382	117
WT-1	6F-H2	120

Dermatopathology	Cat#	Page
BRAF (V600E)	ZR6	25
Desmoglein-3	ZR128	58
Factor XIIIa	ZM84	63
Langerin	ZR170	79
Melan-A (MART-1)	A103	82
Melanosome	HMB-45	82
MiTF (Microphthalmia)	C5/D5	83
PRAME	ZR383	104
S-100	4C4.9	107
S100B	ZR379	108
SOX-10	ZM10	110
SOX-10	ZR275	110
SOX-2	ZM57	109
Tyrosinase	T311	118

General & Epithelial Markers	Clone	Page
CD11c	ZM103	33
CD70	ZR469	43
c-Met ***NEW!!***	ZR478	49
Cyclin-E	ZM121	51
Cytokeratin	CAM5.2	51
Cytokeratin, Pan	AE1/AE3	52
Cytokeratin, Pan	OSCAR	52
Cytokeratin 5	ZM186	52
Cytokeratin 5	ZR280	53
Cytokeratin 5/6	D5/16B4	53
Cytokeratin 5/6	ZR412	53
Cytokeratin 8	ZM123	54
Cytokeratin 8/18	B22.1 & B23.1	54
Cytokeratin 8/18	ZM125	54
Cytokeratin 17	E3	55
Cytokeratin 18	DC-10	55
Cytokeratin 18	ZM205	56
Cytokeratin 19	ZR143	56
EMA	E29	60
EMA	ZR133	61
EP-CAM	ZM131	61
EP-CAM/ESA	MOC-31	61
EP-CAM/ESA	ZR307	61
EZH2	ZR150	63
Galectin-3	ZM182	65
Galectin-3	ZR430	65
MTAP	ZR467	85
MUC-1	ZM32	85
MUC-1	ZR435	85
MUC-4	ZR201	86
p21WAF1	ZR288	95
p27KIP1	SX53G8	95
p53	DO-7	96
p53	ZR153	96
PCNA	ZR378	99

Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

...continued from page 16.

General & Epithelial Markers	Clone	Page
PD-1 (PDCD-1)	ZR408	100
PD-1 (PDCD-1)	ZM357	100
PD-L1	ZR3	100
PHH3	ZR285	101
ROS1	ZR400	107
RRM1	ZR114	107
S100P	ZR115	108
Thymidylate Synthase (TS)	TS106	114
Thymidylate Synthase (TS)	ZR245	114
VEGF	ZR389	119
Topoisomerase II alpha	ZR94	109
TROP2	ZR388	110
VEGF	ZR389	112

GI Pathology	Clone	Page
AFP	C3	20
Arginase-1	ZR368	23
CA19-9	121SLE	27
Cadherin 17	ZR418	28
CD117	ZM321	45
CD117	ZR424	45
CDX2	ZR215	47
CEACAM5	ZR370	47
CEA-M	CEA31	47
CEA-P	Poly	48
Claudin 18.2	ZR451	48
Claudin 18.2 *NEW!!*	ZR482	49
CPA1	ZR450	50
Cytokeratin 20	Ks20.8	56
Cytokeratin 20	ZM42	57
Cytokeratin 20	ZR429	57
DOG-1	ZR146	58
DOG-1	DOG1.1	58
DPC4 (SMAD4)	B-8	59
DPC4 (SMAD4)	ZR392	59
Glutamine Synthetase	ZM377	68
Glutamine Synthetase	ZR431	68
Glypican-3	1G12	68
Glypican-3	ZR405	69
Glypican-3	ZM138	69
HepPar-1	OCH1E5	72
HSP70	ZR152	73
MLH-1	G168-728	83
MLH-1	ZR347	84
MSH-2	ZR260	84
MSH-6	ZR342	84
MSH-6	ZM99	84
MUC-2	Ccp58	85
MUC-2	ZR175	86
MUC-5AC	ZR19	86
MUC-5AC	ZM148	86
Myc (c-Myc)	ZR355	45
PMS-2	ZR317	103
SATB2	ZR167	108
Villin	ZR155	120

Hematopathology	Clone	Page
Annexin A1	ZM211	23
BCL-2	ZR130	24
BCL-2	124	24
BCL-6	ZR380	24
BCL-6	ZM22	24
BOB1	ZM74	25
CD1a	O10	30
CD2	ZR100	30
CD3	ZR414	30
CD3	ZM45	30
CD4	ZM180	31
CD4	ZR110	31
CD5	ZR228	31
CD5	ZM61	31
CD7	ZM213	32
CD7	ZR416	32
CD8	ZM54	32
CD8	ZR286	32
CD10	55C6	33
CD10	ZR468	33
CD10	ZR329	33
CD13	ZM287	34
CD14	ZM104	34
CD15	MMA	34
CD15	ZR417	34
CD16	ZR457	35
CD19	ZM179	35
CD19	ZR212	35
CD20	L26	35
CD20	ZR243	36
CD21	ZM75	36
CD21	ZR419	36
CD22	ZM183	36
CD23	ZM209	37
CD23	ZR225	37
CD25	ZM466	37
CD27	ZR402	37
CD30	Ber-H2	38
CD30	ZR248	38
CD33	PWS44	39
CD35	ZR58	39
CD38	ZR351	39
CD43	DF-T1	40
CD43	ZR403	40
CD44	ZR184	40
CD45RA	ZR118	40
CD45RB (LCA)	ZR361	41
CD45RB (LCA) Cocktail	2B11/PD7-26	41
CD61	ZM33	42
CD68	KP1	42
CD68	ZR302	42
CD71	ZM136	43
CD71	ZR422	43
CD79a	JCB117	43
CD79a	ZR237	44
CD103	ZR404	44

Continued on page 18

...continued from page 17.

Hematopathology	Clone	Page
CD123	ZM80	45
CD123	ZR425	45
CD138	ZR251	46
CD163	ZM29	46
CD163	ZR426	46
CD205	ZM360	46
CTLA-4	ZR452	50
Cyclin D1	ZM178	51
Cyclin D1	ZR197	51
Fascin	ZM192	63
FOXP1	ZR333	64
Granzyme B	ZM66	69
Granzyme B	ZR432	69
ICOS (CD278) ***NEW!!***	ZR476	74
IgA	ZR291	75
IgD	ZR156	75
IgG	ZR247	75
IgG4	ZR299	75
IgG4	ZM56	76
IgM	ZR249	76
Kappa	ZM81	78
Lambda	LcN-2	79
LEF1	ZR336	79
LMO-2	ZR87	80
Lysozyme	ZM120	80
MUM1	ZR411	87
Myeloperoxidase	ZM352	88
OCT-2	ZM90	93
OCT-2	ZR227	93
PAX-5	ZM26	99
PAX-5	ZR268	98
Perforin	ZR270	100
Perforin	ZM159	101
SOX-11	ZR462	110
TCL1	ZM92	113
TdT	ZM51	113
TdT	ZR446	113
TIA-1	2G9A10F5	115
TIA-1	ZR284	115
TRAcP	ZM174	116
TRAcP	ZR234	116
TRBC1 ***NEW!!***	ZR481	116
Tryptase	ZM96	117
ZAP-70	ZM97	120
ZAP-70	ZR410	121

Infectious Markers	Clone	Page
CMV	ZR456	49
EBV-LMP	CS1-4	59
H. Pylori Cocktail	Poly	70
HBcAg	Poly	71
HBsAg	ZR393	71
HHV-8	LN53	72
HHV-8	ZR106	73
HPV Cocktail	CAMVR-1 & C1P5	73
HSV1	10A3	73

...continued from below.

Infectious Markers	Clone	Page
HSV1/2	ZR471 Cocktail	74
HSV2	0192	74
Treponema pallidum	Poly	116

Lung/Mediastinum Pathology	Clone	Page
ALK-1	ZR305	21
BAP1	ZR454	23
Calretinin	ZM85	29
Calretinin	ZR415	29
DLL3 ***NEW!!***	ZR479	58
EGFR (L858R) ***NEW!!***	ZR483	60
EGFR	ZR16	60
GLUT-1	ZM137	67
GLUT-1	ZR308	68
HBME-1	HBME-1	71
Mesothelin	ZM25	82
Napsin-A	ZR206	89
Napsin-A	ZM11	90
p40	ZR303	95
p40	ZR8	96
Podoplanin	ZM31	104
Surfactant	ZM124	112
TTF-1	8G7G3/1	118
TTF-1 NKX2.1	ZR176	118

Neuropathology/Endocrine	Clone	Page
ACTH	ZM98	20
ATRX	ZR244	23
Calcitonin	ZM301	28
CD56	123C3.D5	41
CD56	ZR421	41
CD57	NK-1	42
Chromogranin A	ZM12	48
Chromogranin A	ZR427	48
Cytokeratin 19	BA17	56
FSH	ZR246	65
Gastrin	ZM359	66
GFAP	GA-5	67
GFAP	ZR356	67
Glucagon	ZR470	67
Growth Hormone	ZM140	70
IDH1 (R132H)	ZR7	74
Inhibin-alpha	R1	76
Inhibin-alpha	ZM113	76
INSM1	A8	77
INSM1	ZR395	77
Insulin Cocktail	ZM83a & ZM83b	78
LH	ZR173	80
MGMT	ZM314	83
MGMT	ZR434	83
Myelin Basic Protein (MBP)	ZM202	87
Myelin Basic Protein (MBP)	ZR109	88
NeuN	A60	90
NeuN	ZR386	90
Neurofilament	2F11	90

Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

...continued from page 18.

Neuropathology/Endocrine	Clone	Page
Neurofilament	ZR216	91
NGFR	ZM55	91
NSE	ZM24	92
NSE	ZR406	92
NUT	ZR453	93
Olig2	ZR340	94
Parathyroid hormone (PTH)	ZM207	98
PGP9.5	ZR401	101
PGP9.5	ZM160	101
PHOX2B	ZR292	102
PIT-1/POU1F1	ZM385	102
PIT-1/POU1F1	ZR440	102
Prolactin	ZM203	105
Somatostatin Receptor Type 2	ZR233	109
SOX-9	ZM171	110
Steroidogenic Factor-1 (SF-1)	N1665	112
Steroidogenic Factor-1 (SF-1)	ZR397	111
Synaptophysin	ZM208	112
Synaptophysin	ZR445	112
Thyroglobulin Cocktail	2H11+6E1	114
Thyroid Stimulating Hormone	ZM294	117
Tyrosine Hydroxylase ***NEW!!***	ZR484	118
Ubiquitin	ZM191	119

Soft Tissue Pathology	Clone	Page
Actin, Muscle Specific (MSA)	HHF35	20
Actin, Smooth Muscle (SMA)	1A4	20
ALDH1A1	ZM71	21
Beta-Catenin	ZM13	25
Brachyury	ZR391	26
Caldesmon	ZM79	28
Caldesmon	ZR413	28
Calponin-1	ZM21	29
Calponin-1	ZR297	29
CD99	ZM139	44
CD99	ZR423	44
CDK4	ZR394	47
Collagen IV	ZM177	50
Collagen Type IV	ZR108	50
Desmin	ZR240	57
Desmin	ZM34	57
FLI-1	ZR217	64
H3.3 G34W	ZR459	70
H3K27me3 ***NEW!!***	ZR473	70
INI-1	25	77
INI-1	ZR282	77
MDM2	ZR258	81
MDM2	SMP14	82
MUC-6	ZM89	87
MUC-6	ZR437	87
MyoD1	ZR262	88
Myogenin	F5D	88
Myogenin	ZM149	89
Myoglobin	ZR69	89
Myosin SMHC	SMMS-1	89
NKX2.2	ZM14	91

...continued from below.

Soft Tissue Pathology	Clone	Page
NKX2.2	ZR438	91
Rb	1F8	107
Rb	ZR444	106
SS18-SSX	ZR463	111
STAT6	ZR289	111
TLE1	ZM93	115
Vimentin	ZR381	120

Transplantation Pathology	Clone	Page
C3d	ZM369	21
C4d	ZM78	21

Urinary Pathology	Clone	Page
AMACR	13H4	21
AMACR + p63	13H4+4A4	21
AMACR + p63	13H4+ZM70	22
AMACR + p63 + HMW CK Cocktail	13H4+4A4+34βE12	22
AMACR + p63 + HMW CK Cocktail	13H4+ZM70+34βE12	22
Androgen Receptor (AR)	ZR334	22
CA IX	ZR367	27
Cytokeratin, HMW	34βE12	52
Cytokeratin 7	OV-TL-12/30	53
Cytokeratin 7	ZR428	54
Erythropoietin	ZM135	62
Fumarate Hydratase	ZR458	65
NKX3.1	ZM95	92
NKX3.1	ZR222	92
OCT-4	C-10	94
OCT-4	ZR364	93
p63	4A4	97
p63	ZR439	97
p63	ZM70	97
PAX-2	ZR224	98
PAX-8	ZR1	99
PAX-8	ZM28	99
Prostein (P501S)	ZR9	105
PSA	ZR232	105
PSAP	ZM162	106
PSAP	ZR443	105
PTEN	ZR235	106
RCC	66.4.C2	106
SALL4	ZR276	108
SDHB	ZR339	109
Smoothelin	ZR169	109
TFE3	ZR365	113
Thrombomodulin CD141	ZM105	114
Uroplakin	ZM204	119
Uroplakin II ***NEW!!***	ZR477	119

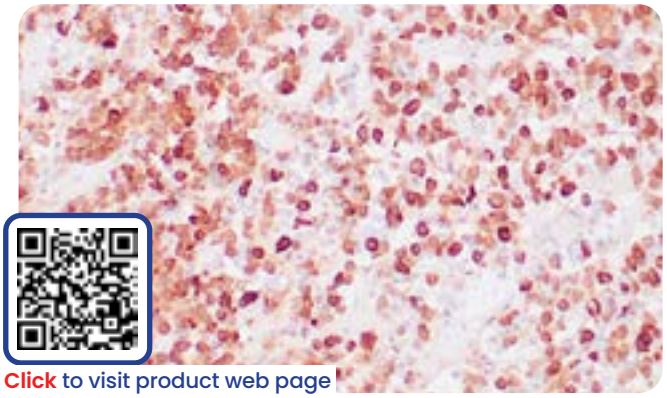
Vascular Markers	Clone	Page
CD31	JC70A	38
CD31	ZR274	38
CD34	QBEnd-10	39
ERG	ZR331	62
Factor VIII-R	ZM64	63

ACTH *(clone ZM98)*

Recombinant. ZM98 recognizes ACTH (Corticotropin), a 39-amino-acid active peptide produced by the anterior pituitary. This antibody is highly specific to CLIP (aa 25–39 of ACTH) and does not react with Synacthen (aa 1–24). Derived from extensive processing of the POMC precursor, ACTH is also produced by immune cells during stress. It serves as a useful marker for classifying pituitary tumors and studying pituitary disease, while also reacting with ectopic ACTH-producing non-pituitary tumors.

Species: Mouse Monoclonal **Cat#:** Z2408 ›››

IHC: Human pituitary stained with ZM98



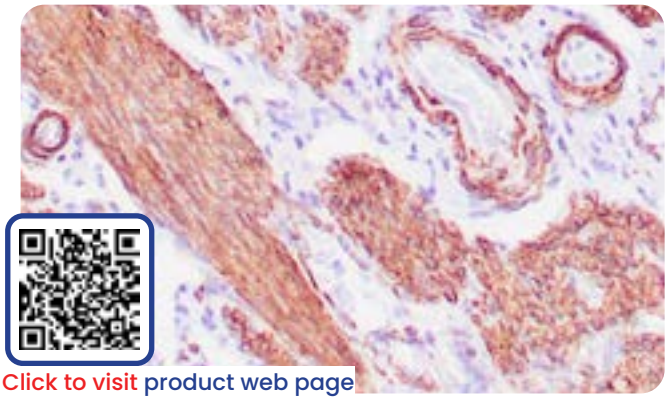
Click to visit product web page

Actin, Muscle Specific *(MSA)* *(clone HHF35)*

Recognizes Muscle Specific Actin (MSA), reacting with tissue extracts of the uterus, ileum, aorta, diaphragm, heart, and smooth muscle cells. This antibody recognizes alpha actin from skeletal, cardiac, and smooth muscle sources, along with gamma actin from smooth muscle cells. In diagnostic surgical pathology, it highlights neoplasms of muscle differentiation. It stains tumors of smooth muscle origin, including leiomyomas and leiomyosarcomas, as well as skeletal muscle malignancies like rhabdomyosarcomas. ›››

Species: Mouse Monoclonal **Cat#:** Z2064

IHC: Human uterus stained with HHF35



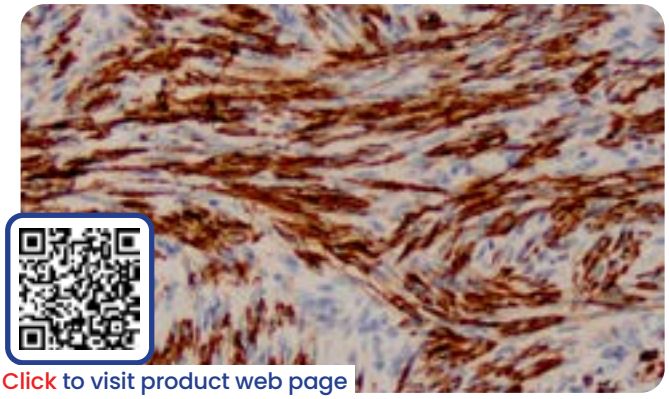
Click to visit product web page

Actin, Smooth Muscle *(SMA)* *(clone 1A4)*

1A4 stains Smooth Muscle Actin (SMA) within smooth muscle cells of the myometrium, vessel walls, and gut wall. This antibody also reacts with myoepithelial cells located in the breast and salivary glands. It effectively recognizes tumors arising from smooth muscles and myoepithelial cells, facilitating precise lineage determination during diagnostic evaluations. Additionally, this versatile Actin antibody can be used as a reliable control for monitoring total protein load on Western blots. ›››

Species: Mouse Monoclonal **Cat#:** Z2066

IHC: Human uterus stained with 1A4



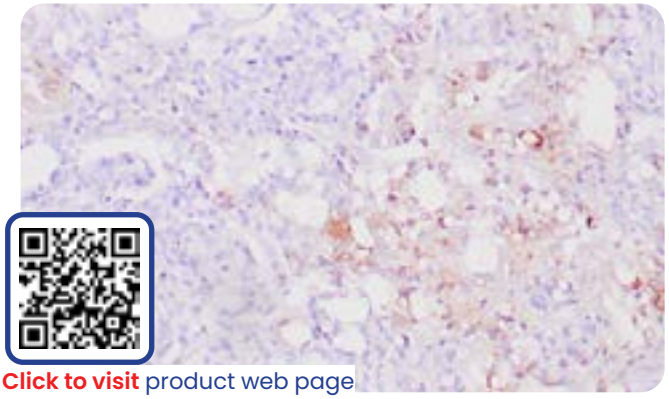
Click to visit product web page

AFP *(clone C3)*

C3 recognizes alpha-fetoprotein (AFP), an oncofetal single-chain glycoprotein of 70kDa. This monospecific antibody is highly specific to AFP, showing no cross-reaction with serum albumin or other oncofetal antigens. Physiologically, AFP is synthesized in the liver, intestinal tract, and yolk sac of the developing fetus. In diagnostic pathology panels, this antibody functions as a valuable tool for tumor classification, where it is useful for detecting hepatocellular carcinomas (HCC) and yolk sac tumors.

Species: Mouse Monoclonal **Cat#:** Z2623 ›››

IHC: Human yolk sac tumor stained with C3



Click to visit product web page

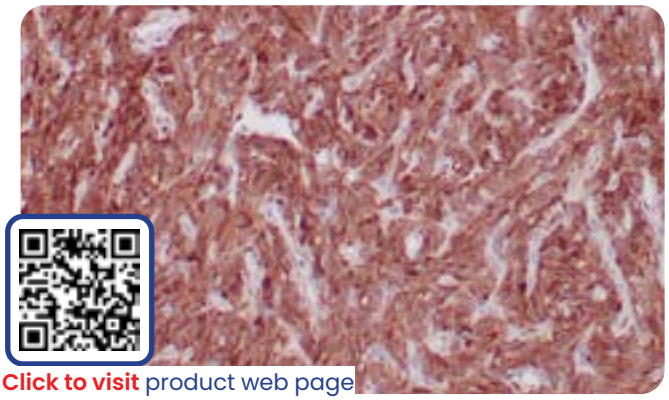
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

ALDH1A1 *(clone ZM71)*

Recombinant. ZM71 recognizes ALDH1A1, a member of the ALDH enzyme family, which comprises 19 evolutionarily conserved isoforms localized in the nucleus, cytoplasm, or mitochondria. Predominantly expressed in neural stem cells, hematopoietic stem cells, and the epithelium of the eye, brain, testis, liver, and kidney, ALDH1A1 mRNA is highly upregulated in solitary fibrous tumors (SFT) and hemangiopericytomas (HPC). Combining anti-ALDH1A1 with anti-CD34 serves as a helpful diagnostic tool to aid in differentiating between SFT, HPC, meningioma, and synovial sarcoma.

Species: Mouse Monoclonal **Cat#:** Z2387 ›››

IHC: Human colon carcinoma stained with ZM71 CD23 (clone ZM209)



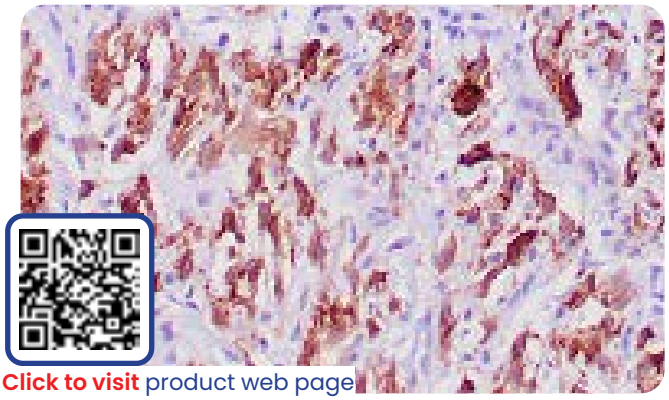
Click to visit product web page

ALK-1 *(clone ZR305)*

Recombinant. ZR305 recognizes ALK-1 (Anaplastic Lymphoma Kinase), an insulin receptor superfamily tyrosine kinase essential for brain development. The underlying ALK-1 gene undergoes rearrangement, mutation, or amplification across malignancies like neuroblastomas, non-small cell lung cancers (NSCLC), and anaplastic large cell lymphomas. This diagnostic antibody exhibits high specificity for the ALK-1 protein, ensuring dependable, positive immunohistochemical staining in ALK-1 positive NSCLC tissues while presenting no background reactivity in negative control specimens.

Species: Rabbit Monoclonal **Cat#:** Z2534 ›››

IHC: Human lung adenocarcinoma stained with ZR305 CD14 (clone ZM104)



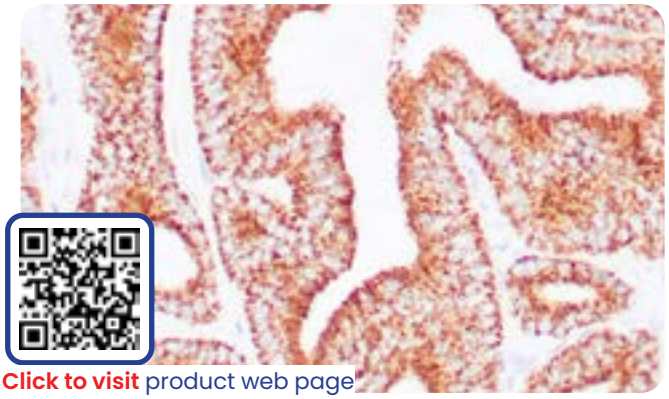
Click to visit product web page

AMACR *(clone 13H4)*

Recombinant. 13H4 recognizes AMACR (P504S), an essential branched-chain fatty acid beta-oxidation enzyme identified via cDNA library subtraction and microarrays. AMACR is highly expressed in paraffin-embedded prostate adenocarcinomas and premalignant lesions—including high-grade prostate intraepithelial neoplasia (PIN) and atypical adenomatous hyperplasia—but is absent in benign tissues. Pairing this positive cytoplasmic marker with basal cell stains like p63 or 34βE12 provides critical diagnostic utility to confirm small focus prostate carcinoma on needle biopsies.

Species: Rabbit monoclonal **Cat#:** Z2001 ›››

IHC: Human prostate carcinoma stained with 13H4



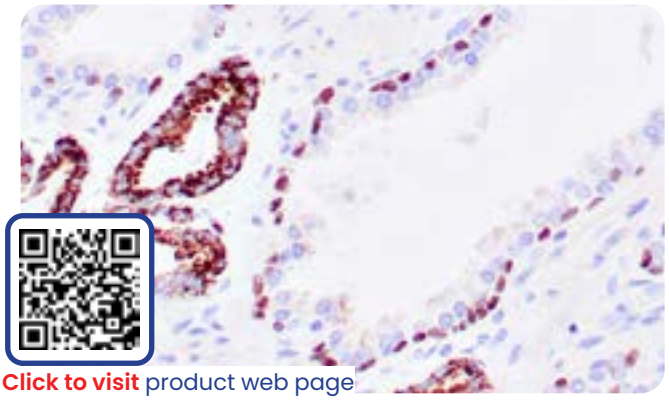
Click to visit product web page

AMACR + p63 *(clone 13H4+4A4)*

A cocktail of monoclonal antibodies for IHC containing AMACR and p63. AMACR is an essential branched-chain fatty acid beta-oxidation enzyme found in prostate adenocarcinoma but not in benign tissue. Conversely, the tumor-suppressor homologue p63 highlights basal cell nuclei across normal prostate glands and PIN but stays completely negative in adenocarcinoma. Combining AMACR and p63 creates an extremely useful diagnostic tool to identify small focus adenocarcinoma and PIN, particularly within limited tissue specimens.

Species: Rabbit & Mouse Monoclonal **Cat#:** Z2005 ›››

IHC: Human prostate carcinoma stained anti-AMACR and anti-p63 antibodies stained with 13H4+4A4



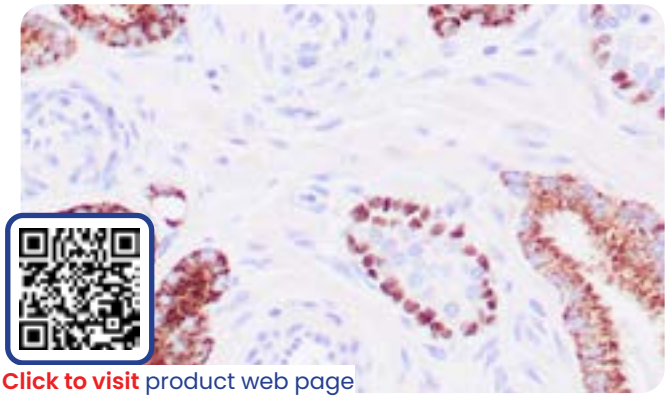
Click to visit product web page

AMACR + p63 (clone 13H4+ZM70)

A cocktail including a rabbit recombinant monoclonal antibody to AMACR and mouse monoclonal to p63. AMACR is an essential enzyme for branched-chain fatty acid beta-oxidation, showing expression in prostate adenocarcinoma but not in benign tissue. Conversely, p63 highlights basal cell nuclei across normal prostate glands and PIN but is negative in adenocarcinoma. Combining AMACR and p63 serves as an extremely useful differential tool to diagnose PIN and small focus adenocarcinoma, especially within limited tissue blocks.

Species: Rabbit & mouse monoclonal **Cat#:** Z2008 >>>

IHC: Human prostate carcinoma stained anti-AMACR and anti-p63 antibodies stained with 13H4+ZM70 Cadherin 17 (clone ZR418)



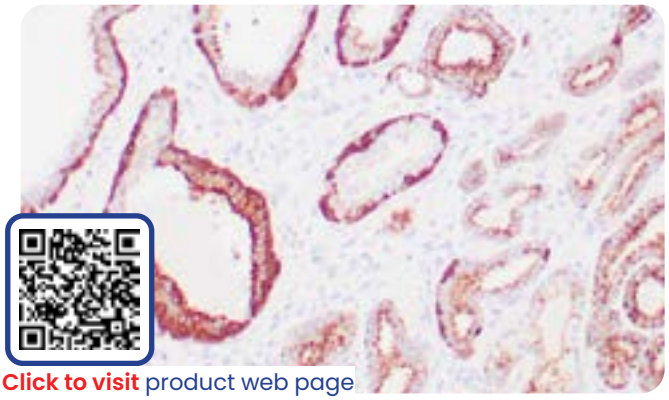
Click to visit product web page

AMACR + p63 + HMW CK Prostate Cocktail (clone 13H4+4A4+34βE12)

A cocktail of monoclonal antibodies for IHC including AMACR, p63, and HMW. AMACR is an essential branched-chain fatty acid beta-oxidation enzyme found in prostate adenocarcinoma but not in benign tissue. Conversely, the p63 and HMW stains highlight basal cells in normal prostate tissue and PIN but are negative in adenocarcinoma. Pairing these markers provides an extremely useful tool to diagnose PIN and small focus adenocarcinoma in difficult cases with limited tissues.

Species: Rabbit & Mouse monoclonal **Cat#:** Z2017 >>>

IHC: Human prostate carcinoma stained anti-AMACR, anti-p63 and anti-HMW CK 34beta E12 antibodies stained with 13H4+4A4+34βE12



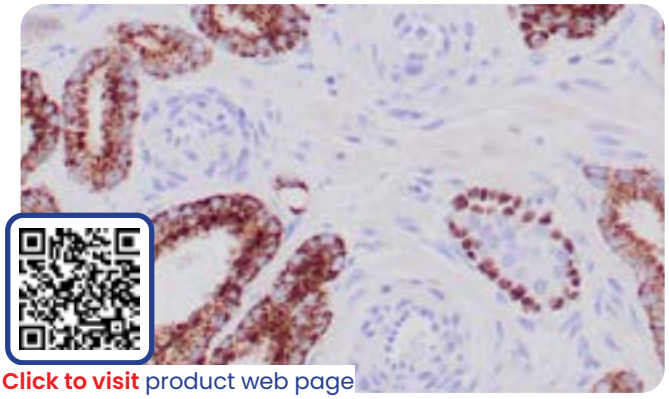
Click to visit product web page

AMACR + p63 + HMW CK Prostate Cocktail (clone 13H4+ZM70+34βE12)

A cocktail of monoclonal antibodies for IHC including AMACR, p63, and HMW. AMACR is an essential branched-chain fatty acid beta-oxidation enzyme found in prostate adenocarcinoma but not in benign tissue. Conversely, the p63 and CK 34βE12 stains highlight basal cell layers in normal prostate glands and PIN but remain entirely negative in adenocarcinoma. This combined panel is extremely useful for diagnosing PIN and small focus adenocarcinoma, especially when evaluating difficult cases with limited tissue.

Species: Rabbit & mouse monoclonal **Cat#:** Z2015 >>>

IHC: Human prostate carcinoma stained anti-AMACR, anti-p63 and anti-HMW CK 34beta E12 antibodies stained with 13H4+ZM70+34βE12



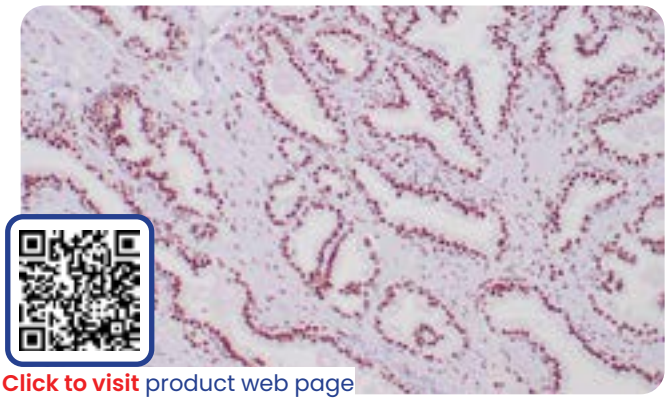
Click to visit product web page

Androgen Receptor (AR) (clone ZR334)

Recombinant. ZR334 recognizes the Androgen Receptor (AR), a nuclear member of the ligand-responsive transcription regulator superfamily. AR mediates male sex hormone actions across several normal tissues, including the prostate, skin, and oral mucosa. Additionally, AR expression carries clinical relevance across a diverse range of human malignancies, including osteosarcoma and prostatic carcinoma. It is recommended for antigen detection as a diagnostic adjunct to conventional, non-immunologic histochemical pathology stains.

Species: Rabbit monoclonal **Cat#:** Z2640 >>>

IHC: Human prostate tissue stained with ZR334



Click to visit product web page

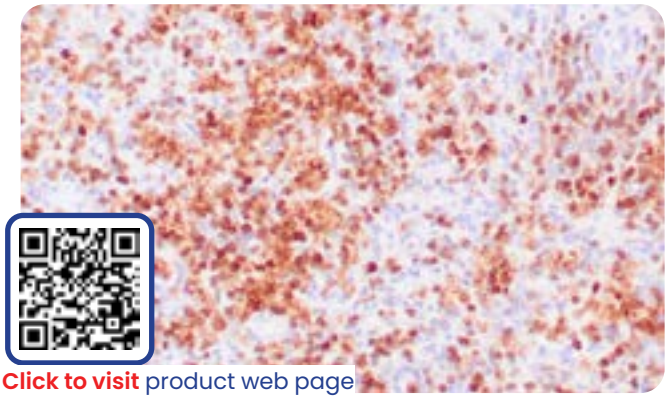
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

Annexin A1 (clone ZM211)

ZM211 recognizes Annexin A1 (ANXA1), a calcium and phospholipid-binding gene product containing four repeats. Highly upregulated in hairy cell leukemia (HCL), ANXA1 protein expression is highly specific, providing a simple, sensitive assay for diagnosing HCL. Furthermore, Annexin A1 protects breast cancer cells against heat-induced DNA damage, suggesting involvement in tumor suppressive and protective activities. This specific protective function is concurrently associated with cellular treatment resistance across select malignancies.

Species: Mouse monoclonal **Cat#:** Z2488 ›››

IHC: Human lymph node involved by hairy cell leukemia stained with ZM211



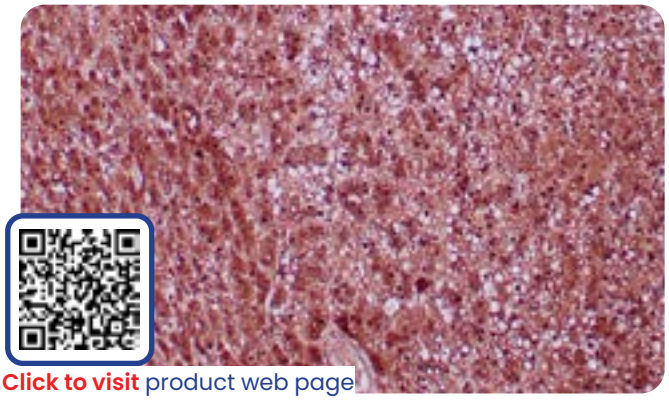
Click to visit product web page

Arginase-1 (clone ZR368)

Recombinant. ZR368 recognizes Arginase-1 (ARG-1), a 35–38kDa manganese metallo-enzyme that catalyzes arginine hydrolysis to generate ornithine and urea. While mitochondrial Arginase II spans various tissues, cytosolic Arginase I functions primarily in the liver urea cycle. This specific antibody labels normal tissue hepatocytes and peripheral blood granulocytes, serving as a sensitive and specific marker for the identification of hepatocellular carcinoma during routine diagnostic pathology evaluations of hepatic tissues.

Species: Rabbit monoclonal **Cat#:** Z2659 ›››

IHC: Formalin-fixed, paraffin-embedded human hepatic adenoma stained with ZR368



Click to visit product web page

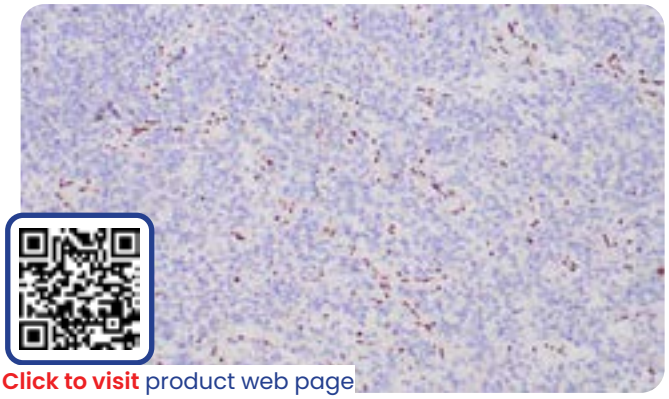
ATRX (clone ZR244)

Recombinant. ZR244 recognizes ATRX, an SNF2 family helicase/ATPase driving ATP-dependent nucleosome remodeling to facilitate transcription initiation. Featuring a PHD zinc finger motif, ATRX undergoes cell cycle regulation and associates with the nuclear matrix during interphase. During mitosis, rapid phosphorylation redistributes ATRX to acrocentric chromosome short arms, where it complexes with heterochromatin protein 1 alpha to mediate chromosomal segregation. Crucially, mutations correlate with severe X-linked syndromal mental retardation associated with alpha thalassemia.

›››

Species: Rabbit monoclonal **Cat#:** Z2718

IHC: Human glioblastoma stained with ZR244



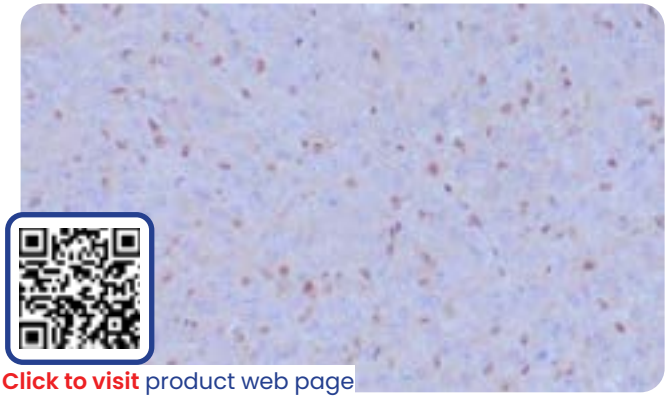
Click to visit product web page

BAP1 (clone ZR454)

Recombinant. Clone ZR454 binds the tumor suppressor BAP1 (BRCA1-Associated Protein 1), which mediates chromatin modulation, transcriptional regulation, and DNA damage responses. Germline mutations increase susceptibility to uveal melanoma, cutaneous melanoma, epithelioid atypical Spitz tumors, and mesothelioma, while somatic mutations appear in clear cell renal cell carcinomas. In diagnostic pathology, BAP1 immunohistochemistry reliably distinguishes malignant mesothelioma (nuclear negative) from reactive mesothelial proliferations (nuclear positive) in tissue specimens.

Species: Rabbit Monoclonal **Cat#:** Z2813 ›››

IHC: Malignant mesothelioma stained with ZR454



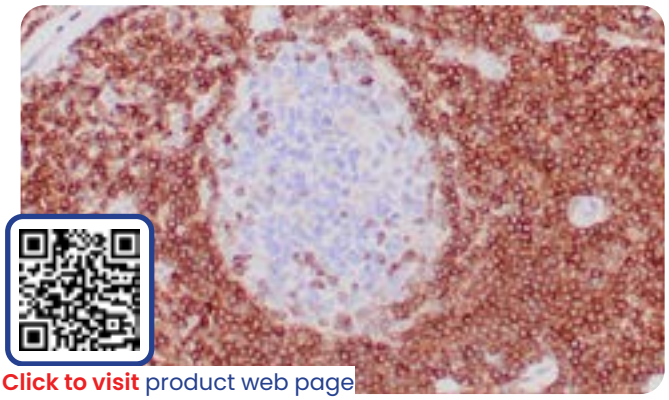
Click to visit product web page

BCL-2 *(clone ZR130)*

Recombinant. ZR130 recognizes BCL-2 (B Cell Lymphoma 2) that encodes a 25 kDa protein preventing cell apoptosis, participating in ion channel formation and membrane permeability. Non-phosphorylated BCL-2 inhibits cell death, whereas Bax homodimers oppose its function to cause apoptosis. BCL-2 expression can reliably distinguish follicular hyperplasia of the lymph node from follicular lymphoma, as follicular lymphomas are usually BCL-2 positive. Additionally, it helps detect immature enteric ganglion cells in pediatric intestinal pseudo-obstruction and carries prognostic value in early-stage breast cancer.

Species: Rabbit Monoclonal **Cat#:** Z2682 ›››

IHC: Human tonsil stained with ZR130



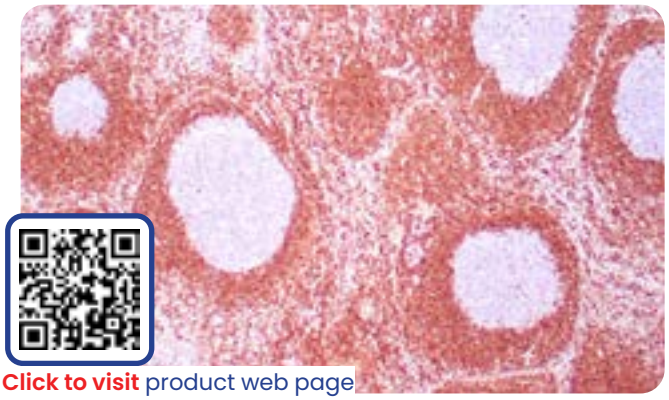
Click to visit product web page

BCL-2 *(clone 124)*

Recognizes BCL-2, an apoptosis inhibitor that controls the balance between positive and negative apoptotic signals. BCL-2 is normally expressed in mantle zone B cells and T cells with an intense perinuclear cytoplasmic pattern, but it is not expressed in reactive germinal center B cells. In follicular lymphoma, the BCL-2 gene undergoes a t(14;18)(q32;q21) translocation, causing protein overexpression. Thus, BCL-2 detection in germinal centers strongly supports a follicular lymphoma diagnosis.

Species: Mouse Monoclonal **Cat#:** Z2022 ›››

IHC: Human reactive lymph node stained with 124



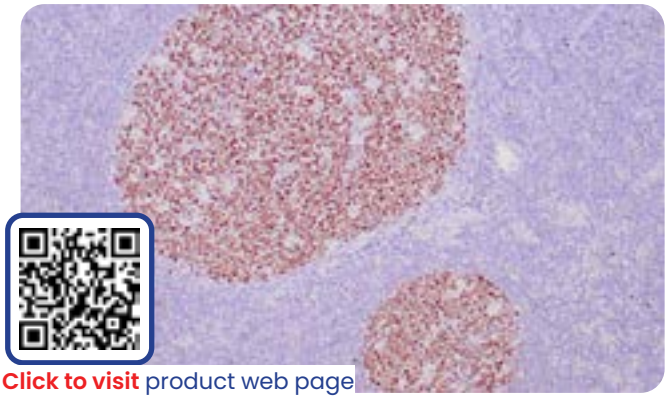
Click to visit product web page

BCL-6 *(clone ZR380)*

Recombinant. BCL-6 is a 95kDa proto-oncogenic transcription factor that serves as a marker of germinal center differentiation. Useful for the differential diagnosis of small B-cell lymphomas, follicular lymphoma typically displays BCL-6 and CD10 positivity. It is an important prognostic marker in diffuse large B-cell lymphomas (DLBCL) to identify germinal center phenotypes. Furthermore, BCL-6 distinguishes classic Hodgkin lymphoma (negative) from nodular lymphocyte predominant Hodgkin lymphoma (positive), while rarely staining mantle cell or MALT lymphomas.

Species: Rabbit Monoclonal **Cat#:** Z2658 ›››

IHC: Human reactive lymph node stained with ZR380



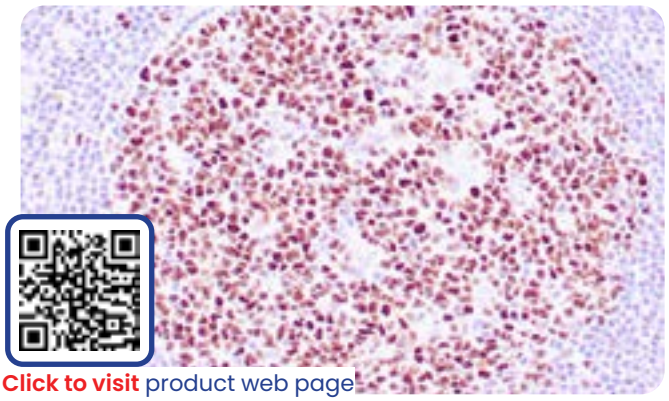
Click to visit product web page

BCL-6 *(clone ZM22)*

Recognizes BCL-6, a 95kDa protein important for the differential diagnosis of small B-cell lymphomas. Follicular lymphoma shows BCL-6 and CD10 positivity, whereas other small B-cell lymphomas are usually BCL-2 negative. BCL-6 also serves as an important prognostic marker in diffuse large B-cell lymphomas (DLBCL). Finally, BCL-6 distinguishes classical Hodgkin lymphoma from nodular lymphocyte predominant Hodgkin lymphoma (NLPHL) because Reed-Sternberg cells are BCL-6 negative whereas NLPHL L&H cells are positive.

Species: Mouse monoclonal **Cat#:** Z2343 ›››

IHC: Human reactive lymph node stained with ZM22



Click to visit product web page

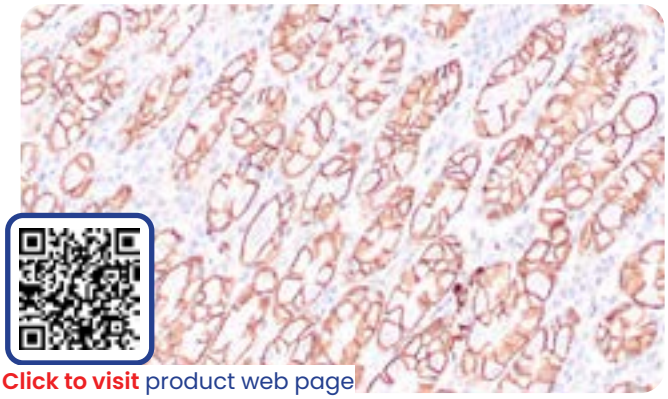
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

Beta-Catenin *(clone ZM13)*

Recombinant. ZM13 recognizes Beta-Catenin, which associates with E-cadherin for cell adhesion molecule function. Normal tissues and breast ductal neoplasias exhibit membrane localization, whereas lobular neoplasias demonstrate a diffuse cytoplasmic pattern. This immuno-staining effectively differentiates low-grade ductal carcinoma in situ (DCIS) from lobular carcinoma. Additionally, select rectal and gastric adenocarcinomas display diffuse cytoplasmic staining without membranous expression, mimicking patterns seen in lobular breast tumors.

Species: Mouse monoclonal **Cat#:** Z2355 ›››

IHC: Human colon adenocarcinoma stained with ZM13



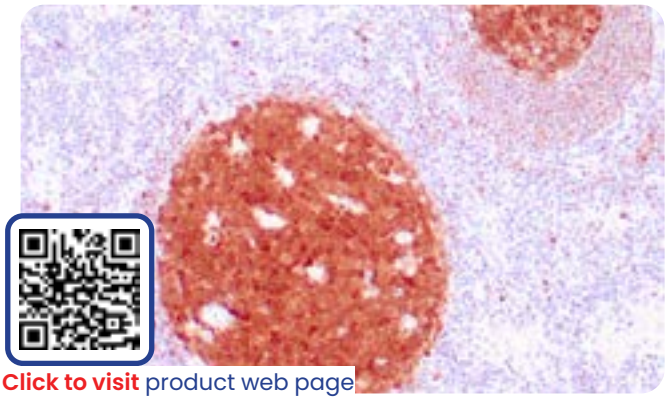
Click to visit product web page

BOB1 *(clone ZM74)*

Recognizes BOB1, a B-cell-specific protein continuously expressed in established lines. L&H cells of nodular lymphocyte predominant Hodgkin lymphoma are consistently immuno-positive due to their germinal center derivation. Conversely, classical Hodgkin lymphoma shows variable BOB1 immuno-reactivity within Reed-Sternberg cells. BOB1 expression appears in follicular center cell lymphoma, diffuse large B-cell lymphoma, and acute myeloid leukemia, whereas B-CLL, marginal zone, and mantle cell lymphomas exhibit weaker staining.

Species: Mouse Monoclonal **Cat#:** Z2384 ›››

IHC: Human lymph node stained with ZM74



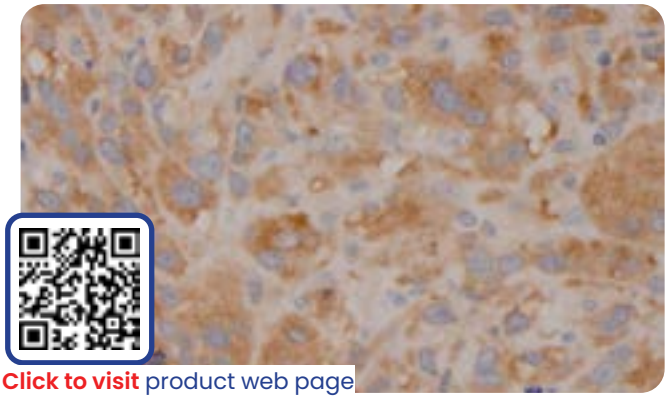
Click to visit product web page

BRAF (V600E) *(clone ZR6)*

Recombinant. ZR6 specifically targets the mutated protein encoded by BRAF (V600E). This mutation yields a constitutively active kinase that drives uncontrolled cell growth through the RAS-RAF-MEK-ERK signaling pathway. This mutation is commonly associated with various cancers, including melanoma, colorectal cancer, and certain types of thyroid cancer, lung cancer, and Hairy cell leukemia. It is utilized in routine immunohistochemistry to find the mutation within tissue specimens..

Species: Rabbit Monoclonal **Cat#:** Z2811 ›››

IHC: Human melanoma stained with ZR6



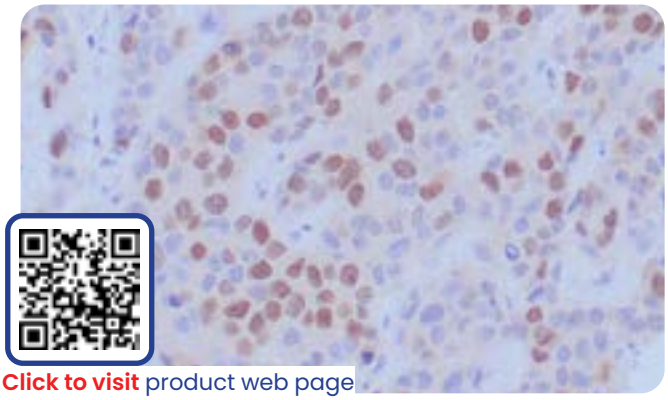
Click to visit product web page

BRCA-1 *(clone ZR455)*

Recombinant. ZR455 detects BRCA-1, a nuclear phosphoprotein tumor suppressor that maintains genomic stability. Mutations in the BRCA-1 gene have been linked to an increased risk of developing breast and ovarian cancers. Changes in BRCA1 expression can be associated with certain types of breast and ovarian cancers, and this information may be used in the diagnosis, prognosis, and treatment planning for patients.

Species: Rabbit Monoclonal **Cat#:** Z2812 ›››

IHC: Human breast carcinoma stained with ZR455



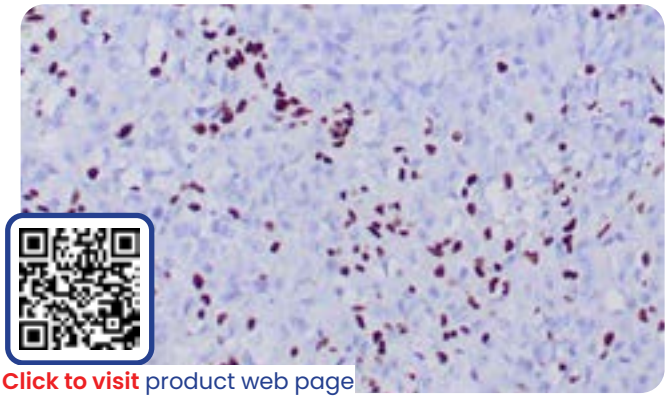
Click to visit product web page

BRG1/SMARCA4 (clone ZR390)

Recombinant. ZR390 recognizes BRG1/SMARCA4, a chromatin-remodeling regulator frequently mutated in malignant neoplasms. Loss of BRG1/SMARCA4 expression characterizes hypercalcemic type small cell carcinoma of the ovary, SMARCA4-deficient undifferentiated uterine sarcoma, and SMARCA4-deficient thoracic tumors. Evaluating this protein allows pathologists to accurately identify these distinct undifferentiated malignancies and differentiate them from other histologically similar tumors during complex gynecologic and thoracic surgical pathology workups.

Species: Rabbit monoclonal **Cat#:** Z2746 >>>

IHC: Human ovarian small cell carcinoma stained with ZR390



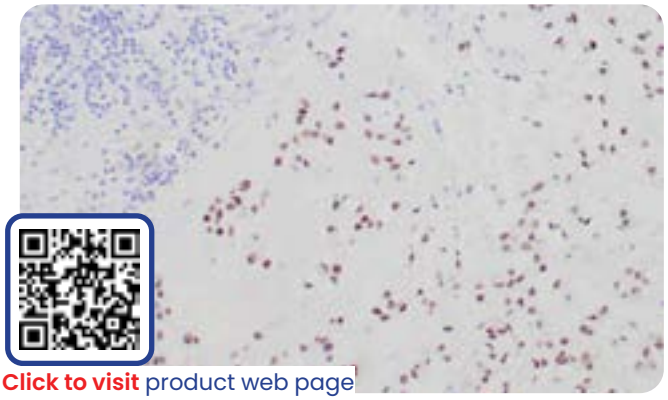
Click to visit product web page

Brachyury (clone ZR391)

Recombinant. ZR391 targets Brachyury, a T-box transcription factor crucial for vertebrate notochord and mesoderm development. In malignant cells, Brachyury activates an epithelial-mesenchymal transition to drive metastatic progression. Possessing a unique conserved DNA-binding domain, it acts as a selective transcriptional activator. In diagnostic pathology panels, identifying Brachyury expression is highly effective for distinguishing chordomas from morphologically overlapping tumors like clear cell renal cell carcinomas, chondrosarcomas, and chordoid meningiomas.

Species: Rabbit monoclonal **Cat#:** Z2747 >>>

IHC: Human chordoma stained with ZR391



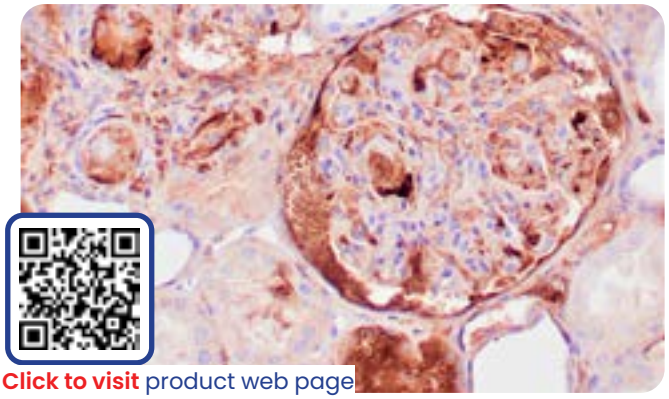
Click to visit product web page

C3d (clone ZM369)

Recombinant. ZM369 targets complement component C3d, an activation remnant that links the classical and alternative pathways. C3d deposition in renal transplant peritubular capillaries indicates acute rejection with a high probability of graft loss. Paired with anti-C4d, it helps diagnose acute allograft rejection. It also serves to outline the epidermal basement membrane in 97% of bullous pemphigoid cases and reveals intercellular deposition in 27% of pemphigus vulgaris.

Species: Mouse Monoclonal **Cat#:** Z2660 >>>

IHC: Human transplanted kidney stained with ZM369



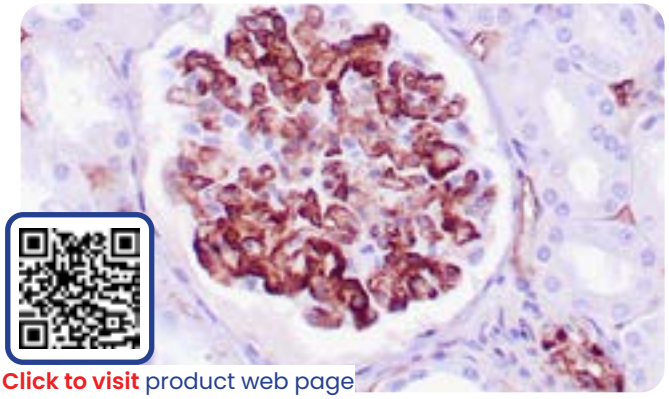
Click to visit product web page

C4d (clone ZM78)

Recombinant ZM78 recognizes C4d, a stable split product remnant that covalently binds to the endothelium and basement membranes following classical complement pathway activation. As an established biomarker for antibody-mediated acute renal transplant rejection, C4d localizes to peritubular capillaries during cellular, vascular, hyperacute, chronic, or borderline rejection. Measuring C4d capillary deposition provides significant predictive data regarding long-term transplant kidney graft survival.

Species: Mouse Monoclonal **Cat#:** Z2388 >>>

IHC: Human rejected kidney stained with ZM78



Click to visit product web page

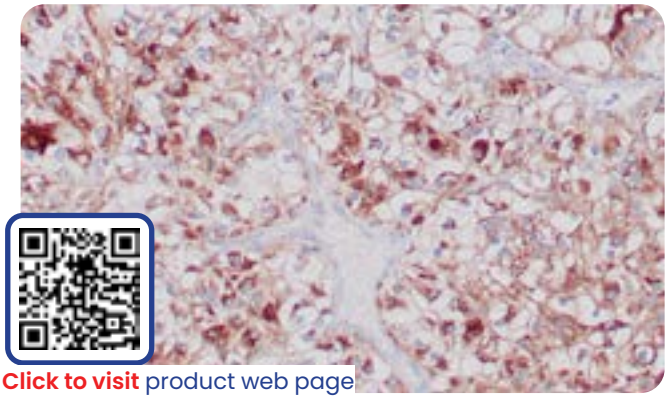
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

CA IX *(clone ZR367)*

Recombinant. ZR367 targets CA IX (gp200), a transmembrane glycoprotein upregulated by hypoxia and necrosis. In normal renal tissue, it localizes to the proximal tubule brush border and Bowman's capsule. Because it highlights proximal nephrogenic tumors showing tubular differentiation, CA IX expression is demonstrated by 93% of primary and 84% of metastatic renal cell carcinomas, making it a helpful diagnostic marker to investigate renal cell malignancies.

Species: Rabbit Monoclonal **Cat#:** Z2740 ›››

IHC: Normal human renal tissue stained with ZR367



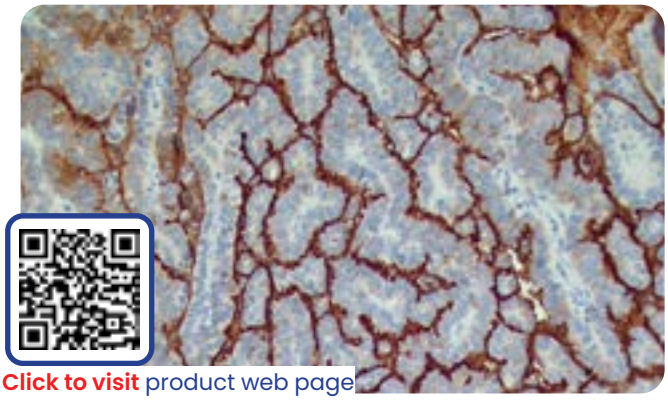
Click to visit product web page

CA125 / MUC16 *(clone ZR485)*

ZR485 reconizes Mucin 16, an ovarian cancer-associated antigen, is used as a marker to monitor the progress of epithelial ovarian cancer. It is a hydrophilic membrane-associated protein that may be involved in vitamin A functions. The Mucin 16 protein (also commonly referred to as CA125), encoded for by the gene MUC16, is a very high molecular weight tumor antigen consisting of three domains: a carboxy terminal domain, an extracellular domain and an amino terminal domain.

Species: Rabbit Monoclonal **Cat#:** Z2860 ›››

IHC: Human ovarian adenocarcinoma stained with ZR485



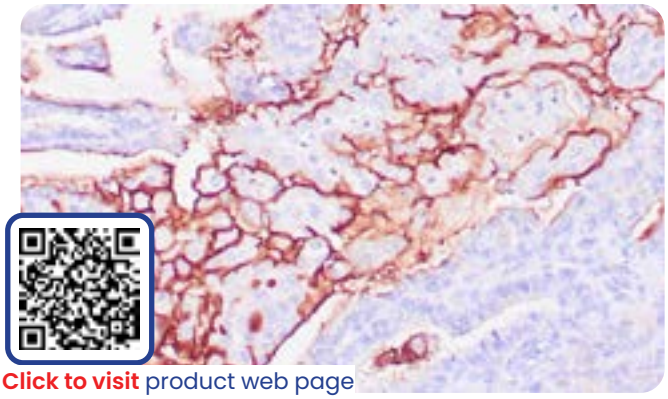
Click to visit product web page

CA125 (MUC16) *(clone ZM53)*

Recombinant. ZM53 recognizes CA125 (MUC16), a hydrophilic, membrane-associated mucin glycoprotein containing polymorphic tandem repeats. It forms a protective polysaccharide biofilm over mucosal epithelium and participates in cell signaling and adhesion. Comprising extracellular, amino, and carboxy-terminal domains, this ovarian cancer-associated antigen serves as a valuable tool in clinical diagnostic panels. Tracking CA125 tissue expression levels helps monitor the clinical progression and status of epithelial ovarian cancers.

Species: Mouse monoclonal **Cat#:** Z2363 ›››

IHC: Human ovarian carcinoma stained with ZM53



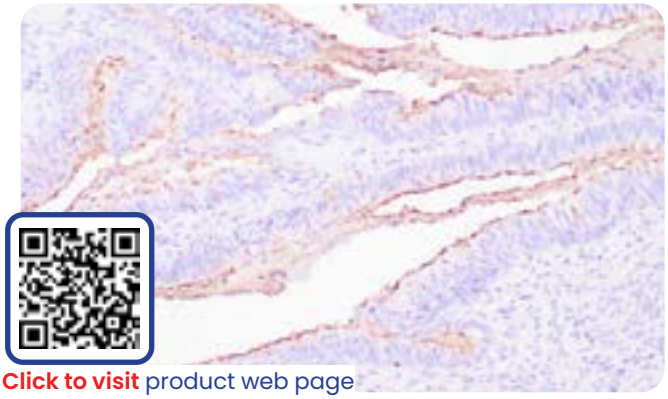
Click to visit product web page

CA19-9 *(clone 121SLE)*

121SLE recognizes CA19-9, a sialyl Lewis a carbohydrate epitope on a high-molecular-weight mucin exceeding 400kDa. Present in individuals with Lewis a or b blood group antigens, it localizes to breast, kidney, salivary, and sweat gland ducts. Expression is vastly enhanced in gastrointestinal malignancies, including gastric, intestinal, and pancreatic adenocarcinomas. Preoperative levels drop post-surgery in stage I pancreatic carcinoma, and serial testing can predict disease recurrence.

Species: Mouse monoclonal **Cat#:** Z2072 ›››

IHC: Human colon carcinoma stained with 121SLE



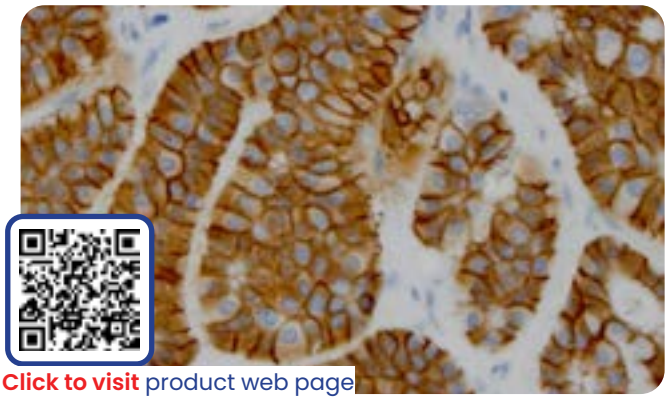
Click to visit product web page

Cadherin 17 *(clone ZR418)*

Recombinant. ZR418 recognizes Cadherin 17 (Liver-Intestine Cadherin), a 120kDa calcium-dependent adhesion molecule that mediates cell-cell binding for structural tissue maintenance. Featuring a large extracellular domain with five homologous repeats that determine binding specificity, it interacts with intracellular beta-catenin. Strictly restricted to the basolateral domain of enterocytes and hepatocytes, Cadherin 17 serves as a novel, highly reliable diagnostic marker for adenocarcinomas of the digestive system.

Species: Rabbit Monoclonal **Cat#:** Z2774 ›››

IHC: Human colon adenocarcinoma stained with ZR418



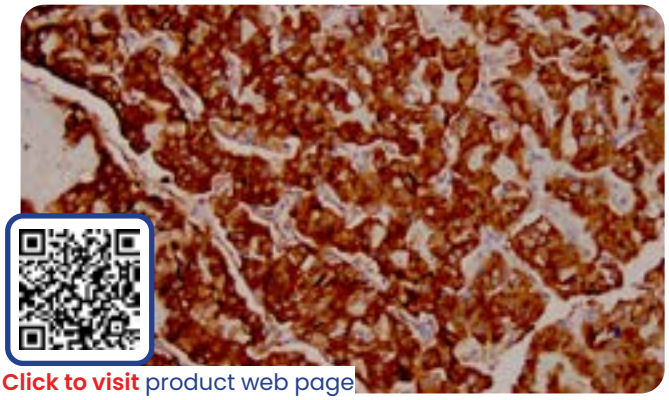
Click to visit product web page

Calcitonin *(clone ZM301)*

Recombinant. ZM301 mouse antibody recognizes Calcitonin, a 32-amino-acid thyroid polypeptide hormone that preserves skeletal integrity by decreasing osteoclast activity and reducing calcium absorption. The CALCA gene undergoes alternative splicing to yield transcripts for calcitonin, procalcitonin, katacalcin, and the vasodilatory neuropeptide CGRP1 in neurons. While Calcitonin localizes to thyroid C-cells, CGRP1 shares functions with CGRP2, which is encoded by a duplicated CALCB gene identified across mice, rats, and humans.

Species: Mouse Monoclonal **Cat#:** Z2731 ›››

IHC: Human thyroid medullary carcinoma stained with ZM301



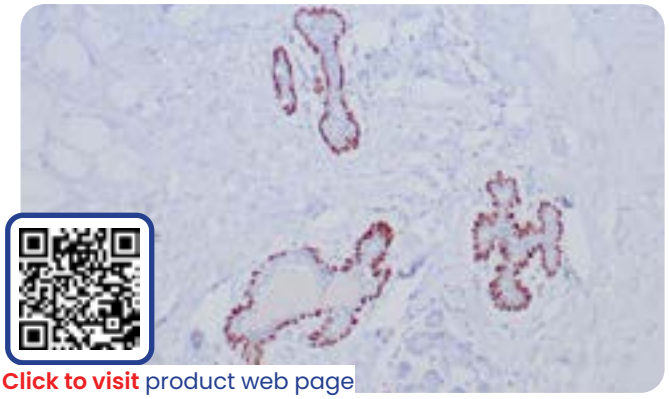
Click to visit product web page

Caldesmon *(clone ZR413)*

Recombinant. ZR413 targets h-caldesmon, a high-molecular-weight smooth muscle variant that binds actin, myosin, tropomyosin, and calmodulin. It reacts with human aortic media on Western blots, remaining unreactive with skeletal muscle or fibroblasts. This antibody effectively identifies smooth muscle differentiation across neoplasms of myofibroblastic or myoepithelial lineage. Clinically, evaluating h-caldesmon expression serves as a reliable diagnostic tool to differentiate epithelioid mesothelioma from serous papillary adenocarcinoma of the ovary.

Species: Rabbit monoclonal **Cat#:** Z2769 ›››

IHC: Normal human breast tissue stained with ZR413



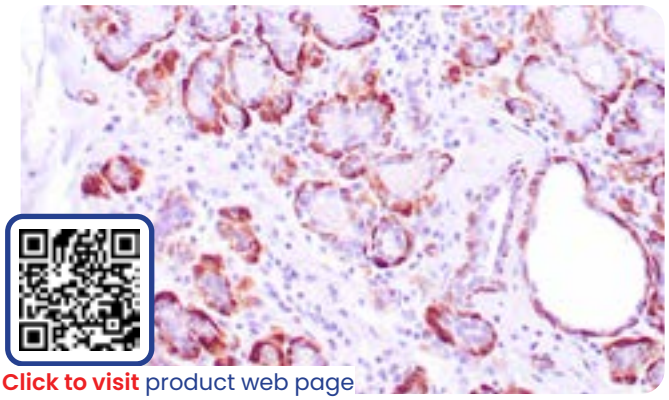
Click to visit product web page

Caldesmon *(clone ZM79)*

Recombinant. ZM79 targets h-caldesmon, a high-molecular-weight variant that interacts with actin, myosin, tropomyosin, and calmodulin to regulate cellular contraction. It reacts with human aortic media extracts on Western blots but is unreactive with skeletal muscle or fibroblasts. This antibody effectively detects smooth muscle differentiation across tumors exhibiting myofibroblastic or myoepithelial lineages, while concurrently helping to differentiate epithelioid mesothelioma from ovarian serous papillary carcinomas.

Species: Mouse Monoclonal **Cat#:** Z2389 ›››

IHC: Human breast tissue stained with ZM79



Click to visit product web page

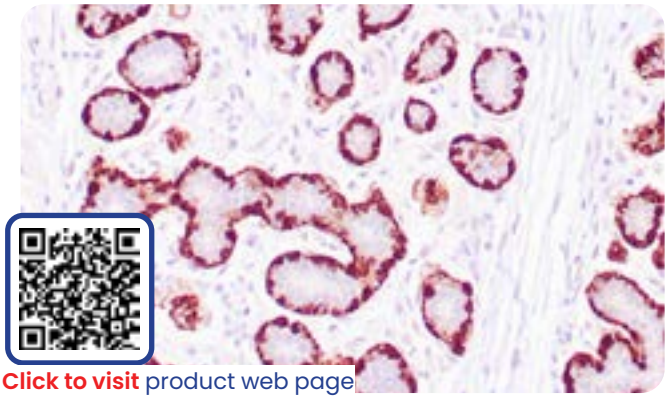
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

Calponin-1 (clone ZR297)

Recombinant. ZR297 targets Calponin-1, specifically isolating the 34kDa high-molecular-weight isoform expressed in visceral and vascular smooth muscle. It remains unreactive with cultivated human foreskin fibroblast extracts or the 29kDa l-Calponin variant. This actin and calmodulin-binding protein regulates smooth muscle contraction. Since expression is restricted to smooth muscle, it serves as a dependable marker to identify the contractile phenotype of developing smooth muscle cell lines.

Species: Rabbit Monoclonal **Cat#:** Z2612 ›››

IHC: Human normal breast tissue stained with ZR297



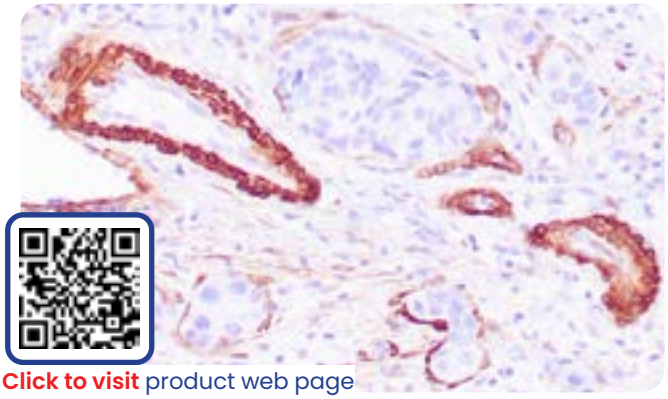
Click to visit product web page

Calponin-1 (clone ZM21)

Recombinant. ZM21 targets Calponin-1, specifically recognizing the 34kDa high-molecular-weight isoform found in vascular and visceral smooth muscle. It does not react with cultivated human foreskin fibroblasts or the 29kDa l-Calponin variant. Acting as an actin and calmodulin-binding protein, it regulates smooth muscle contraction. Because expression is restricted to smooth muscle cell lineages, it serves as a highly reliable marker for the contractile phenotype in surgical pathology panels.

Species: Mouse Monoclonal **Cat#:** Z2341 ›››

IHC: Human breast ductal carcinoma *in situ* stained with ZM21



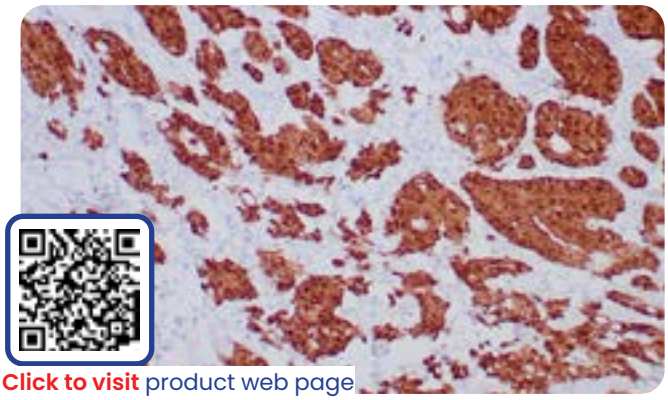
Click to visit product web page

Calretinin (clone ZR415)

Recombinant. ZR415 targets Calretinin (Calbindin 2), a 29kDa vitamin D-dependent calcium-binding signaling protein expressed in subsets of central and peripheral neurons. In surgical pathology, it helps differentiate mesothelioma from lung adenocarcinoma and adrenal cortical neoplasms from pheochromocytomas. Furthermore, Calretinin immunohistochemistry provides a superior, highly specific diagnostic tool for detecting Hirschsprung disease compared to traditional histochemical staining methods paired with acetylcholinesterase evaluations.

Species: Rabbit monoclonal **Cat#:** Z2771 ›››

IHC: Human mesothelioma stained with ZR415



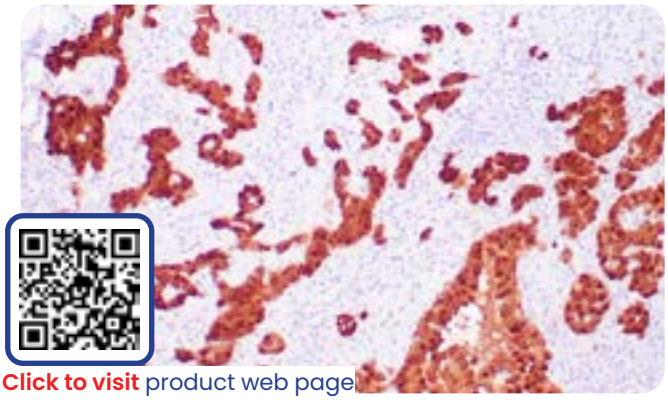
Click to visit product web page

Calretinin (clone ZM85)

Recombinant. ZM85 recognizes Calretinin (Calbindin 2), a 29kDa vitamin D-dependent calcium-binding protein that participates in intracellular signaling. It is normally expressed within specific neuronal subsets throughout the brain, spinal cord, and sensory ganglia. In diagnostic surgical pathology panels, this antibody functions as a valuable tool for lineage confirmation. It is primarily utilized to differentiate malignant mesothelioma from lung adenocarcinoma, and adrenal cortical tumors from pheochromocytomas.

Species: Mouse monoclonal **Cat#:** Z2392 ›››

IHC: Human mesothelioma stained with ZM85



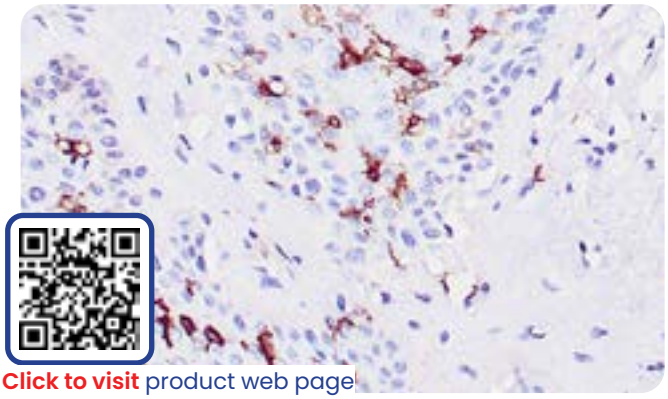
Click to visit product web page

CD1a *(clone O10)*

O10 recognizes CD1a, a surface protein expressed on cortical thymocytes and epidermal Langerhans cells. Belonging to a five-gene family, CD1 proteins restrict T-cell responses to non-peptide lipid antigens during non-classical presentation. This marker targets dermal dendritic networks, though it can cross-react with CD1b in small tonsillar lymphocyte clusters. It serves as an effective tool for immunophenotyping select leukemias and lymphomas during routine surgical pathology investigations.

Species: Mouse Monoclonal **Cat#:** Z2096 ›››

IHC: Human skin stained with O10



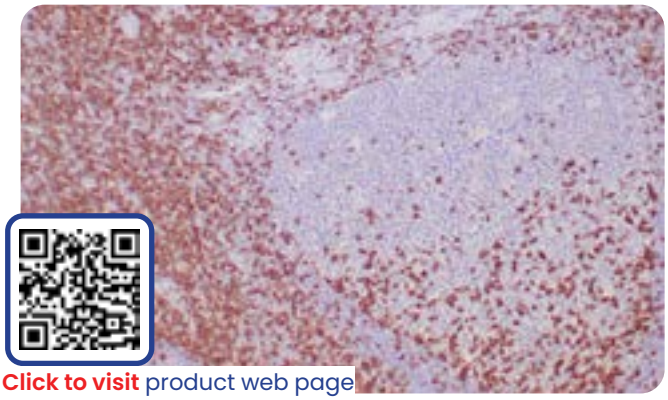
Click to visit product web page

CD2 *(clone ZR100)*

Recombinant. ZR100 targets CD2, a surface marker predominantly found on natural killer (NK) cells and mature T-cell membranes. This diagnostic antibody serves as a valuable tool for studying normal T-cell biology and characterizing T-cell malignancies. It assists in identifying precursor and mature T-cell neoplasms, including anaplastic large cell lymphomas. Detecting the aberrant loss of CD2 helps pathologists reliably differentiate malignant lymphomas from benign, reactive T-cell proliferations.

Species: Rabbit Monoclonal **Cat#:** Z2603 ›››

IHC: Human tonsil stained with ZR100



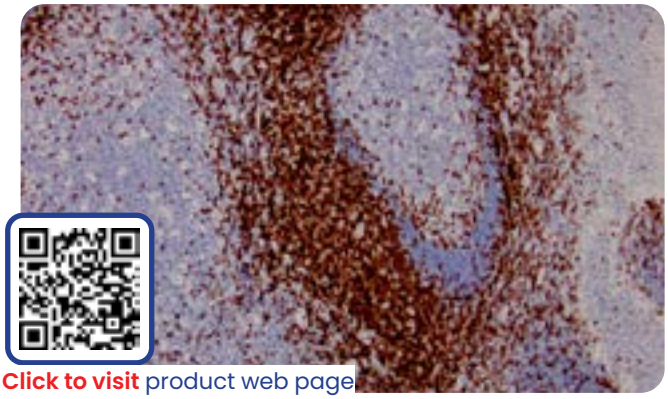
Click to visit product web page

CD3 *(clone ZR414)*

Recombinant. ZR414 targets the epsilon chain of CD3, a five-chain signaling complex ranging from 16 to 28 kDa. Associated with the T-cell receptor, it mediates intracellular transduction upon antigen recognition. CD3 marks early T-cell commitment, moving from a cytoplasmic pattern in cortical thymocytes to cell-surface expression in medullary thymocytes. This specific marker stains both membranes and cytoplasm, reliably identifying malignant T-cell neoplasms across paraffin-embedded tissues.

Species: Rabbit Monoclonal **Cat#:** Z2770 ›››

IHC: Human lymph node stained with ZR414



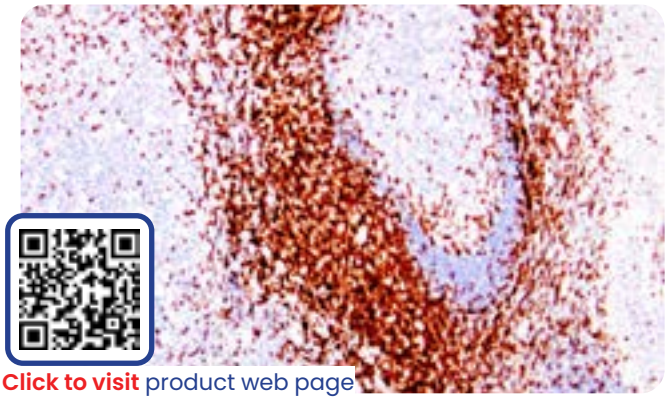
Click to visit product web page

CD3 *(clone ZM45)*

Recombinant. ZM45 targets the intracytoplasmic epsilon chain of CD3, a multi-chain signaling complex ranging from 16 to 28 kDa. Closely associated with the T-cell receptor, it drives intracellular signal transduction. CD3 indicates early T-lineage commitment, shifting from an intracellular pattern in cortical thymocytes to a surface distribution in medullary stages. This marker is highly reliable for identifying and classifying benign or malignant T-cell neoplasms in formalin-fixed blocks.

Species: Mouse Monoclonal **Cat#:** Z2352 ›››

IHC: Human lymph node stained with ZM45



Click to visit product web page

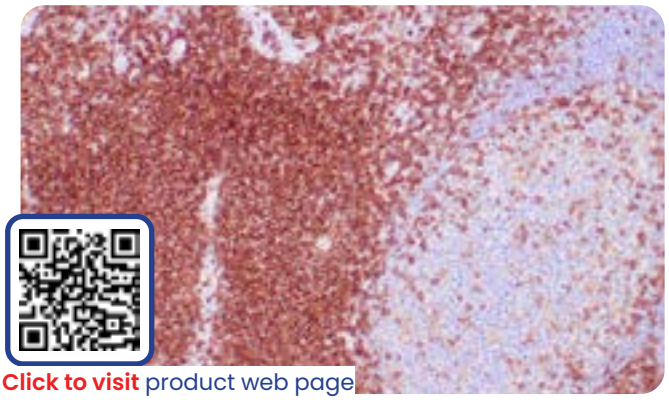
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

CD4 (clone ZR110)

Recombinant. ZR110 recognizes CD4, a 55kDa transmembrane coreceptor belonging to the immunoglobulin superfamily. Expressed on helper/inducer T cells, monocytes, and thymocytes, it interacts with MHC class II molecules during antigen presentation. It is also present on CD4+ CD25+ FOXP3+ regulatory T cells that maintain peripheral self-tolerance. In clinical pathobiology, detecting CD4 expression serves as a crucial parameter for immunophenotyping lymphomas and characterizing complex inflammatory tissue infiltrates.

Species: Rabbit Monoclonal **Cat#:** Z2420 ›››

IHC: Human tonsil stained with ZR110



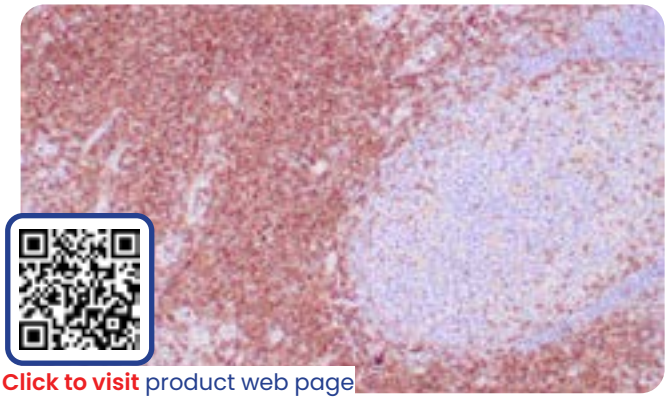
Click to visit product web page

CD4 (clone ZM180)

Recombinant. ZM180 recognizes CD4, a 55kDa transmembrane glycoprotein belonging to the immunoglobulin superfamily. It is expressed on helper/inducer T cells, monocytes, and thymocytes, serving as a coreceptor for MHC class II antigen presentation. Additionally, CD4+ CD25+ FOXP3+ regulatory T cells maintain peripheral immune tolerance. Clinically, this cell surface marker serves as a key indicator for classifying lymphomas and evaluating diverse inflammatory conditions in diagnostic pathology panels.

Species: Mouse Monoclonal **Cat#:** Z2482 ›››

IHC: Human tonsil stained with ZM180



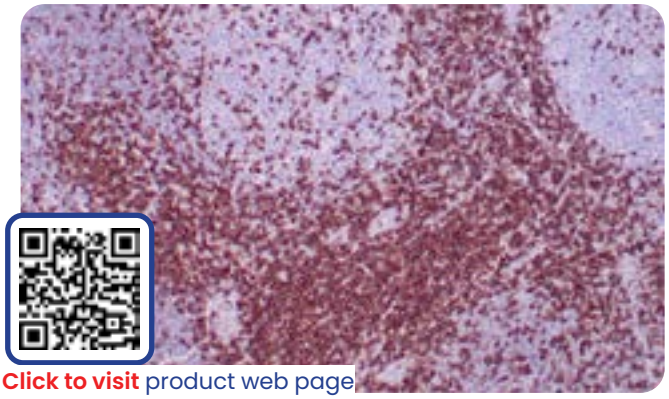
Click to visit product web page

CD5 (clone ZR228)

Recombinant. ZR228 recognizes CD5, a 67kDa transmembrane pan T-cell marker present on thymocytes and peripheral lymphocytes, but absent on granulocytes. Beyond T-cell malignancies, CD5 is aberrantly expressed in specific B-cell neoplasms, including mantle cell lymphoma and CLL/SLL. Paired with anti-CD23, CD5 serves as a core diagnostic marker to differentiate small B-cell lymphoproliferative disorders. It also reliably distinguishes positive thymic carcinomas from negative thymomas in mediastinal biopsies.

Species: Rabbit Monoclonal **Cat#:** Z2521 ›››

IHC: Human tonsil stained with ZR228



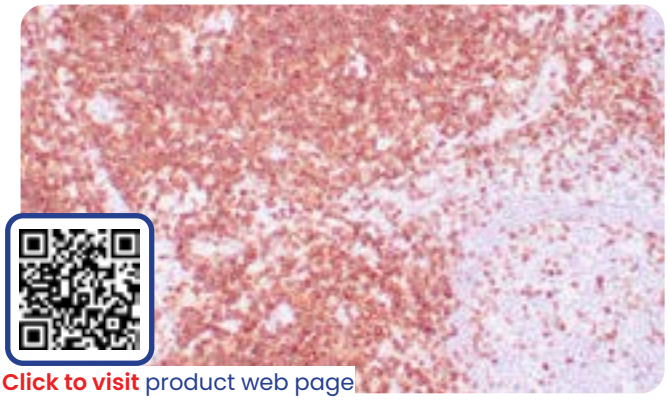
Click to visit product web page

CD5 (clone ZM61)

Recombinant. ZM61 targets CD5, a 67kDa transmembrane pan T-cell marker expressed on thymocytes and lymph node T-cell areas. Beyond T-cell neoplasms, CD5 shows aberrant expression in select B-cell malignancies, including mantle cell lymphoma and CLL/SLL. Evaluated alongside other B-cell markers, particularly anti-CD23, CD5 detection proves highly diagnostic for differentiating mature small lymphoid cell processes. Additionally, it distinguishes positive thymic carcinomas from negative thymomas.

Species: Mouse Monoclonal **Cat#:** Z2371 ›››

IHC: Human tonsil stained with ZM61



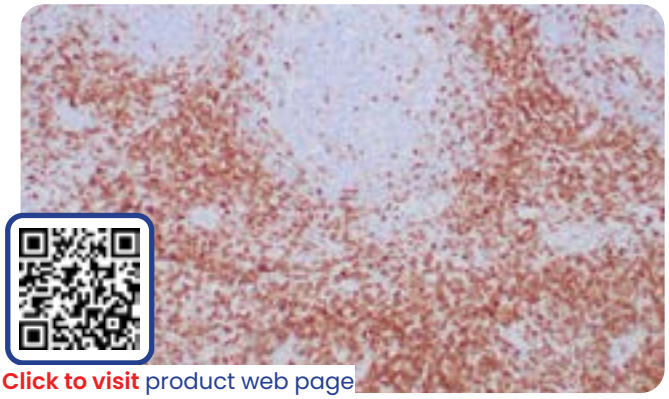
Click to visit product web page

CD7 (clone ZR416)

Recombinant. ZR416 targets CD7 (gp40, Leu9), a 40kDa immunoglobulin gene superfamily member featuring an N-terminal domain homologous to Ig kappa light chains. CD7 is expressed across mature and immature T-lymphocytes, natural killer cells, and subsets of B cells. Cross-linking surface CD7 drives tyrosine phosphorylation via phosphoinositol 3'-kinase to modulate leukocyte adhesion, proliferation, and cytokine secretion, making it an essential diagnostic marker for T-cell leukemias.

Species: Rabbit monoclonal **Cat#:** Z2772 ›››

IHC: Human tonsil stained with ZR416



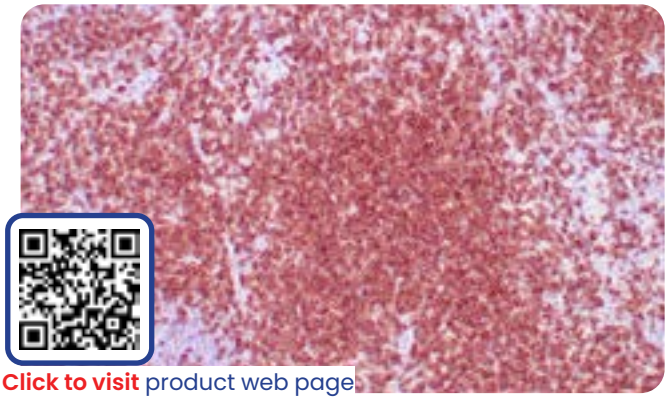
Click to visit product web page

CD7 (clone ZM213)

Recombinant. ZM213 targets CD7 (gp40, Leu9), a 40kDa immunoglobulin gene superfamily member with an N-terminal region homologous to Ig kappa-L chains. CD7 is expressed on mature and immature T-lymphocytes, natural killer cells, and a subset of normal or malignant B cells. Cross-linking surface CD7 modulates T and NK cell adhesion, cytokine secretion, and proliferation. Ligation drives tyrosine phosphorylation via phosphoinositol 3'-kinase, making it a key marker for T-cell leukemias.

Species: Mouse monoclonal **Cat#:** Z2548 ›››

IHC: Human lymph node stained with ZM213



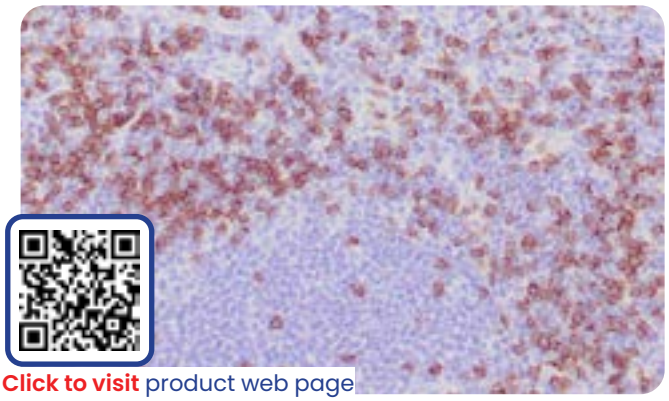
Click to visit product web page

CD8 (clone ZR286)

Recombinant. ZR286 targets the CD8 cell surface receptor, which functions as an alpha/beta heterodimer or alpha/alpha homodimer. Expressed on thymocytes, mature T lymphocytes, and NK cells, it binds MHC class I molecules and associates with protein tyrosine kinase p56lck. Evaluated alongside anti-CD4, it serves as a valuable tool to isolate suppressor T-lymphocytes. It helps classify peripheral T-cell malignancies, identifies anaplastic large cell lymphomas, and stains littoral cell angioma of the spleen.

Species: Rabbit Monoclonal **Cat#:** Z2601 ›››

IHC: Human tonsil stained with ZR286



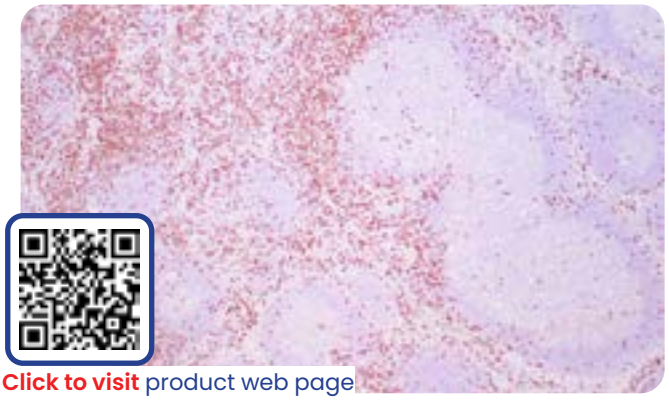
Click to visit product web page

CD8 (clone ZM54)

Recombinant. ZM54 recognizes CD8, a cell surface receptor expressed as a heterodimer or homodimer on thymocytes, mature T cells, and NK cells. Binding to MHC class I molecules, it interacts with protein tyrosine kinase p56lck to guide T-cell development. Because CD4 and CD8 are mutually exclusive in mature T cells, anti-CD8 is used alongside anti-CD4 to identify suppressor T-lymphocytes. It helps distinguish helper/inducer cells, classifies T-lymphoblastic leukemia, and highlights splenic littoral cell angioma.

Species: Mouse Monoclonal **Cat#:** Z2364 ›››

IHC: Human tonsil stained with ZM54



Click to visit product web page

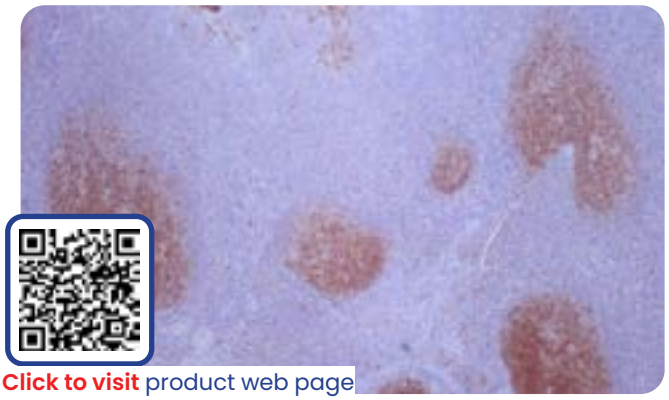
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

CD10 *(clone ZR468)*

Recombinant. ZR468 recognizes CD10, a cell surface neutral metalloendopeptidase alternatively designated Common Acute Lymphocytic Leukemia Antigen (CALLA). This enzyme inactivates various biologically active peptides and is expressed across lymphoid lymphoblastic, Burkitt's, and follicular germinal center lymphomas. It also reacts with chronic myelocytic leukemia cells. Normal expression spans early lymphoid progenitor cells, immature bone marrow B cells, breast myoepithelial structures, bile canaliculi, fibroblasts, and the brush borders of kidney and gut epithelium.

Species: Rabbit Monoclonal **Cat#:** Z2828 ›››

IHC: Human follicular lymphoma stained with ZR468



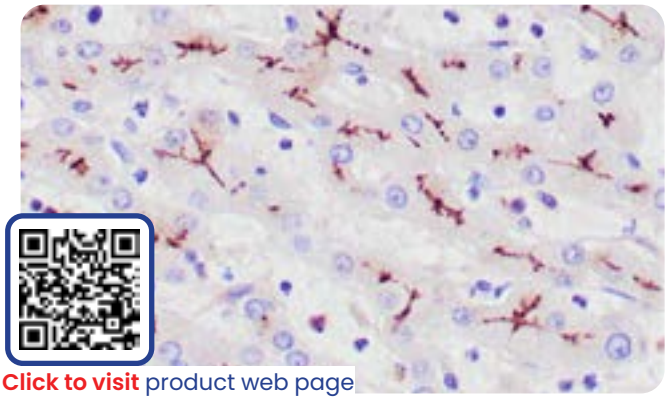
Click to visit product web page

CD10 *(clone ZR329)*

Recombinant. ZR329 targets CD10 (CALLA), a cell surface enzyme exhibiting neutral metalloendopeptidase activity that breaks down multiple biologically active peptides. It serves as an essential biomarker for chronic myelocytic leukemia, lymphoblastic lymphoma, Burkitt's lymphoma, and follicular germinal center lymphomas. This protein normally localizes to early lymphoid progenitors, bone marrow immature B cells, breast myoepithelial layers, bile canaliculi, and fibroblasts, peaking along the brush border of renal and gastrointestinal epithelial structures.

Species: Rabbit Monoclonal **Cat#:** Z2678 ›››

IHC: Human liver stained with ZR329



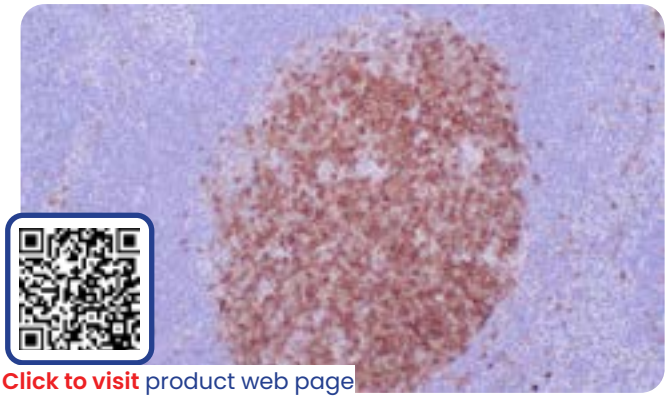
Click to visit product web page

CD10 *(clone 55C6)*

55C6 recognizes CD10, also called Common Acute Lymphocytic Leukemia Antigen (CALLA). This cell surface neutral metalloendopeptidase inactivates diverse biologically active peptides. It is expressed on normal early lymphoid progenitors, bone marrow immature B cells, and germinal center B cells. It also marks chronic myelocytic leukemia, lymphoblastic lymphomas, and Burkitt's lymphomas. CD10 heavily localizes to breast myoepithelial cells, bile canaliculi, fibroblasts, and the brush borders of renal and intestinal epithelial cells.

Species: Mouse Monoclonal **Cat#:** Z2809 ›››

IHC: Human follicular lymphoma stained with 55C6



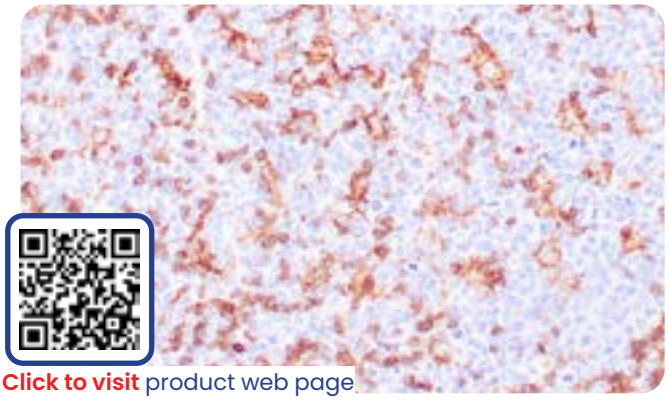
Click to visit product web page

CD11c *(clone ZM103)*

Recombinant. ZM103 recognizes CD11c (ITGAX), a 145kDa leuko-integrin family member that shares a common beta subunit with CD11a, CD11b, and CD11d. It regulates phagocytosis, cell migration, and cytokine production in monocytes and macrophages. This antigen binds prominently to plasma membranes on monocytes, tissue macrophages, NK cells, and dendritic cells. Consequently, this antibody serves as an effective immunohistochemical marker to identify hairy cell leukemia and diverse neoplastic lesions of histiocytic origin.

Species: Mouse Monoclonal **Cat#:** Z2414 ›››

IHC: Human tonsil stained with ZM103



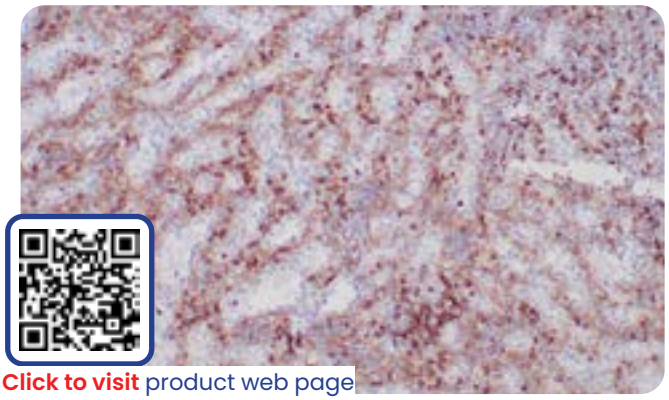
Click to visit product web page

CD13 *(clone ZM287)*

Recombinant. ZM287 recognizes CD13 (aminopeptidase-N), a 150kDa integral membrane metalloprotease that targets an extracellular epitope essential for myeloid cell differentiation. It is expressed on granulocytes, monocytes, mast cells, fibroblasts, endothelial structures, and most acute or chronic myeloid leukemias. Because it remains completely absent from normal lymphocytes, platelets, and erythrocytes, this specific antibody serves as an effective immunohistochemical biomarker for diagnosing acute myeloid leukemias and characterizing histiocytic or myeloid tumors.

Species: Mouse Monoclonal **Cat#:** Z2524 >>>

IHC: Human spleen stained with ZM287



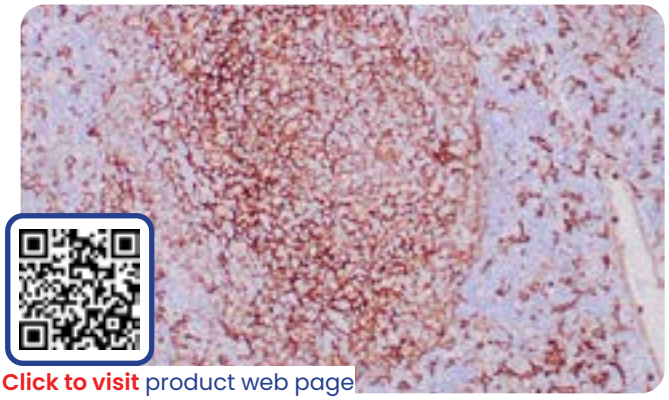
Click to visit product web page

CD14 *(clone ZM104)*

Recombinant. ZM104 recognizes CD14, a 55kDa glycosylphosphatidylinositol-anchored protein functioning as a high-affinity lipopolysaccharide (LPS) receptor. As a critical pattern recognition receptor, CD14 complexes with MD2 and TLR4 on macrophages to detect microbial antigens and trigger cytokine release. This antibody effectively identifies mature monocytes, tissue macrophages, Langerhans cells, and dendritic cells. Clinically, evaluating CD14 expression via immunohistochemical staining serves as a valuable tool for confirming chronic myelomonocytic leukemia and diagnosing histiocytic sarcoma.

Species: Mouse Monoclonal **Cat#:** Z2415 >>>

IHC: Human tonsil stained with ZM104



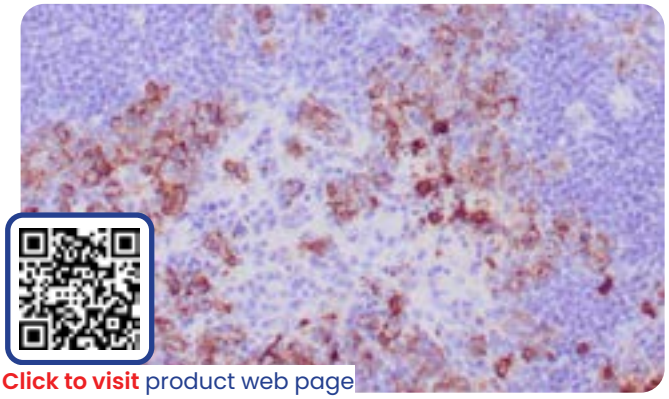
Click to visit product web page

CD15 *(clone ZR417)*

Recombinant. ZR417 targets CD15, alternatively designated 3-fucosyl-N-acetyllactosamine (3-FAL) or X-hapten. This carbohydrate antigen actively coordinates cellular chemotaxis, phagocytosis, and downstream bactericidal responses. It is strongly expressed on more than 95% of mature granulocytes, including circulating neutrophils and eosinophils, and presents lower reactivity in monocytes. In diagnostic surgical pathology, this antibody serves as an indispensable tool for identifying Hodgkin's disease by highlighting classic Reed-Sternberg cells within tissues.

Species: Rabbit Monoclonal **Cat#:** Z2773 >>>

IHC: Human Hodgkin lymphoma stained with ZR417



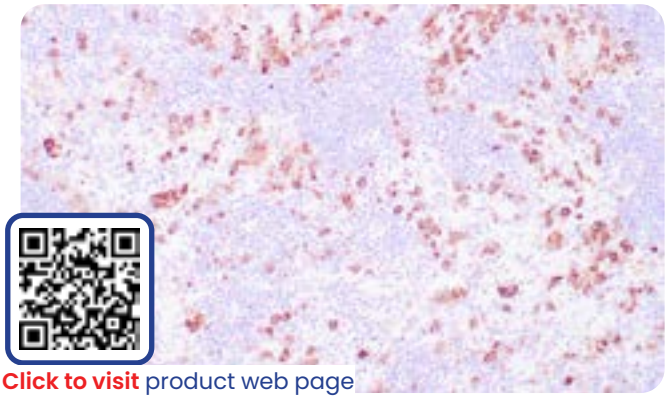
Click to visit product web page

CD15 *(clone MMA)*

MMA recognizes CD15 (3-fucosyl-N-acetyllactosamine), a carbohydrate cell surface antigen involved in mediating neutrophil phagocytosis, bactericidal activity, and chemotaxis. This antigen is highly expressed on over 95% of mature granulocytes, circulating monocytes, and diagnostic Reed-Sternberg cells. In clinical immunohistochemistry, this specific antibody serves as an essential biomarker for identifying Hodgkin's lymphoma. Furthermore, evaluating CD15 expression enables pathologists to reliably differentiate positive pulmonary adenocarcinomas from negative mesotheliomas in surgical specimens.

Species: Mouse Monoclonal **Cat#:** Z2028 >>>

IHC: Human Hodgkin lymphoma stained with MMA



Click to visit product web page

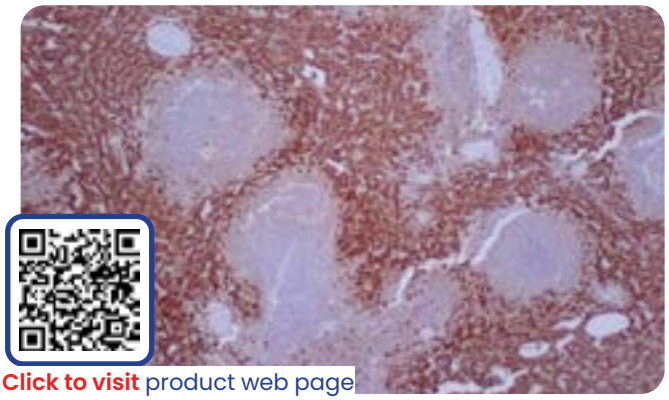
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

CD16 (clone ZR457)

Recombinant. ZR457 recognizes CD16, also known as Fc-gamma receptor III (Fcgamma RIII), a cell-surface protein expressed on natural killer (NK) cells, monocytes, macrophages, and neutrophils. This receptor plays a vital role by mediating antibody-dependent cellular cytotoxicity (ADCC). In surgical pathology, CD16 immunohistochemistry functions as a valuable diagnostic tool within complex panels, helping differentiate hepatosplenic gamma-delta T-cell lymphoma and gamma-delta T-cell large granular lymphocyte leukemia from other peripheral T-cell lymphomas.

Species: Rabbit Monoclonal **Cat#:** Z2816 ›››

IHC: Human spleen stained with ZR457



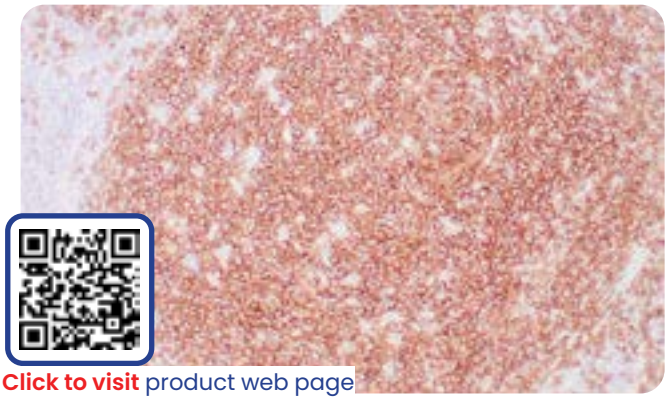
Click to visit product web page

CD19 (clone ZR212)

Recombinant. ZR212 targets CD19, a pan B-cell marker expressed continuously from pre-B cells through mature stages. Its immunoreactivity pattern mirrors CD20 and CD22 within germinal centers, mantle zones, and interfollicular areas, but uniquely encompasses early pre-B cells. This antibody highlights the vast majority of B-cell neoplasms—including small lymphocytic, mantle cell, and Burkitt lymphomas—often at a lower intensity. Because T-cell malignancies, plasma cell tumors, and classical Hodgkin lymphoma test negative, it ensures precise lineage determination.

Species: Rabbit Monoclonal **Cat#:** Z2547 ›››

IHC: Human tonsil stained with ZR212



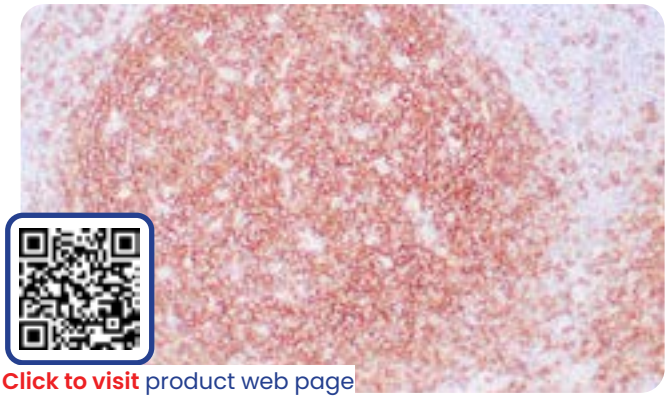
Click to visit product web page

CD19 (clone ZM179)

Recombinant. ZM179 recognizes CD19, a transmembrane glycoprotein with two extracellular domains. As a reliable surface marker of B-cell lineage across maturational stages, its continuous expression spans from pre-B cells through terminal plasma cell differentiation. It labels benign and malignant B-cell conditions, including follicular and diffuse large B-cell lymphomas, commonly at a lower intensity than normal cells. Conversely, plasma cell tumors, T-cell malignancies, and classical Hodgkin lymphoma Reed-Sternberg cells remain consistently negative.

Species: Mouse Monoclonal **Cat#:** Z2481 ›››

IHC: Human tonsil stained with ZM179 CD21 (clone ZM75)



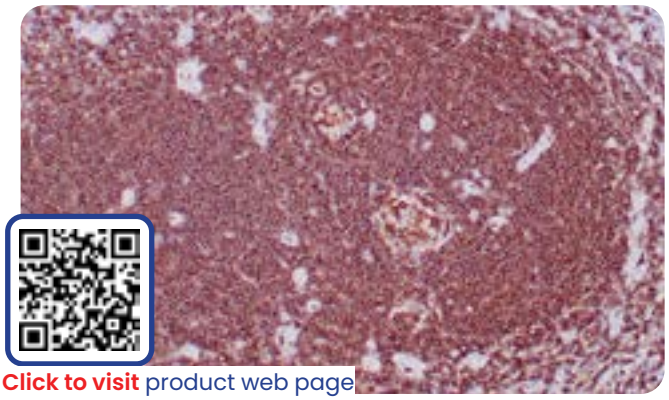
Click to visit product web page

CD20 (clone ZR243)

Recombinant. ZR243 targets CD20, a 30–33 kDa non-Ig B-cell differentiation antigen restricted to normal and neoplastic B-cells. Expressed from the pre-B stage through mature development, CD20 is lost during terminal plasma cell differentiation. This lineage marker reacts with germinal center blasts, B-immunoblasts, and derived lymphomas, making it an excellent tool for localizing tissue B lymphocytes. Notably, it can also highlight Reed-Sternberg cells in specific Hodgkin disease cases and detects rare, aberrant CD20-positive T-cell lymphomas.

Species: Rabbit Monoclonal **Cat#:** Z2717 ›››

IHC: Human lymph node stained with ZR243



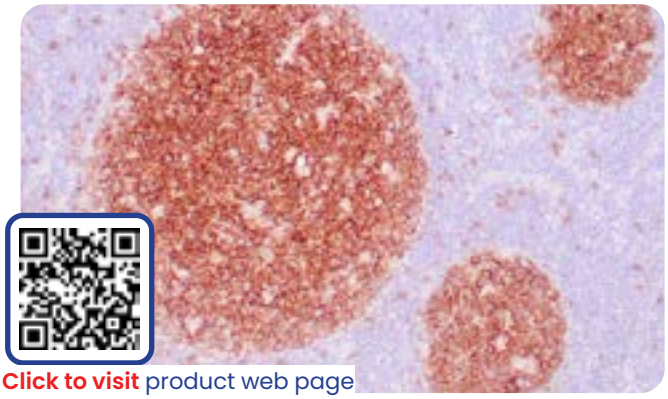
Click to visit product web page

CD20 (clone L26)

L26 recognizes CD20, a non-Ig differentiation antigen whose expression is strictly restricted to normal and neoplastic B-cells. CD20 is completely absent from all other leukocytes and tissues, serving as the most specific B-cell marker used in paraffin immunohistochemistry panels. Functionally, CD20 acts as a calcium channel involved in B-cell activation and cell cycle progression. It is a reliable diagnostic tool to identify, localize, and immunophenotype B-lineage cells within tissue sections.

Species: Mouse Monoclonal **Cat#:** Z2059 >>>

IHC: Human lymph node stained with L26



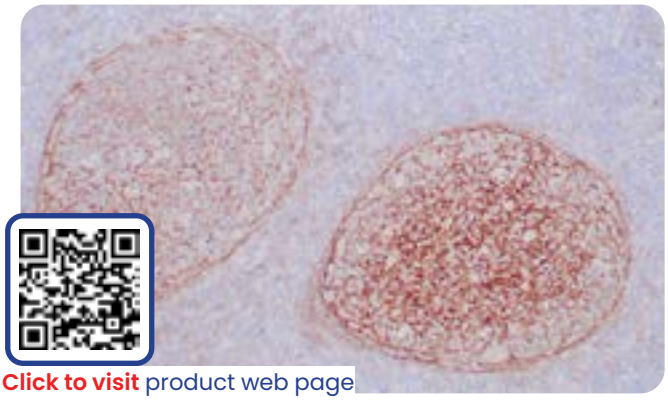
Click to visit product web page

CD21 (clone ZR419)

Recombinant. ZR419 targets CD21, a 140kDa protein known as complement receptor 2 (CR2). It is strongly expressed on mature B cells and follicular dendritic cells, while remaining weakly present on immature thymocytes and T lymphocytes. Appearing after the pre-B stage, CD21 persists through peripheral B-cell development before being lost during terminal plasma cell differentiation. Functionally, CD21 acts as a receptor for EBV, IFN-alpha, and complement split products to assemble an activation complex.

Species: Rabbit Monoclonal **Cat#:** Z2775 >>>

IHC: Human tonsil stained with ZR419



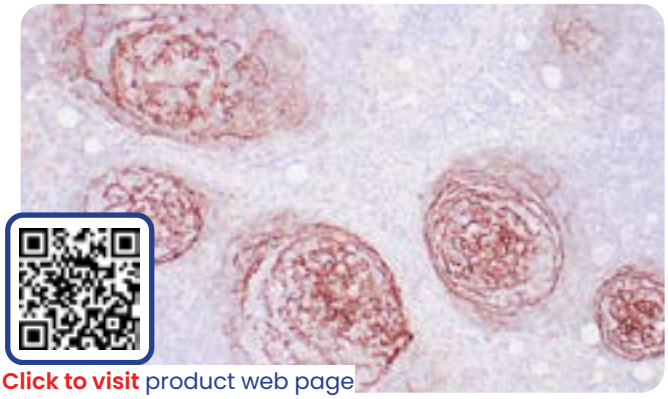
Click to visit product web page

CD21 (clone ZM75)

Recombinant. ZM75 recognizes CD21, a 140kDa surface protein identified as complement receptor 2 (CR2). Strongly expressed on mature B cells and follicular dendritic cells, it appears after the pre-B stage, persists during peripheral development, and disappears during terminal plasma cell differentiation. CD21 serves as a cell surface receptor for EBV, IFN-alpha, and complement components C3d, C3dg, and iC3b. Additionally, it binds CD23 and associates with CD19, CD81, and Leu13 to drive mature B-cell activation.

Species: Mouse Monoclonal **Cat#:** Z2385 >>>

IHC: Human tonsil stained with ZM75



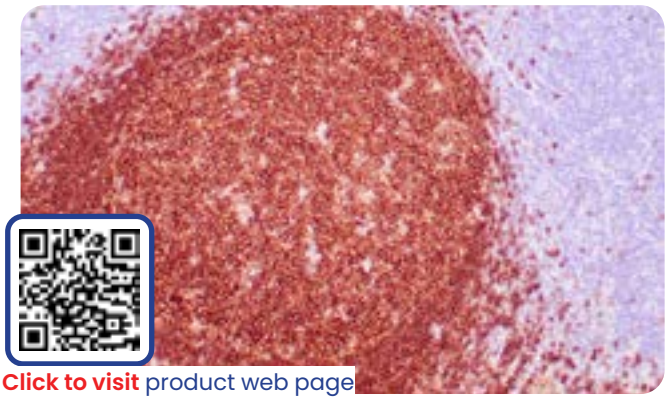
Click to visit product web page

CD22 (clone ZM183)

Recombinant. ZM183 binds to CD22 (BL-CAM), a 130–140 kDa immunoglobulin superfamily member restricted to normal and neoplastic B cells. Arising early within pro- and pre-B cell cytoplasm, CD22 moves to the cell surface as B cells mature, persisting heavily in follicular mantle and marginal zones while remaining weak in germinal centers and absent on plasma cells. Functioning as an adhesion receptor for sialic acid-bearing ligands, CD22 associates with tyrosine kinases to modulate B-cell activation.

Species: Mouse Monoclonal **Cat#:** Z2496 >>>

IHC: Human spleen stained with ZM183



Click to visit product web page

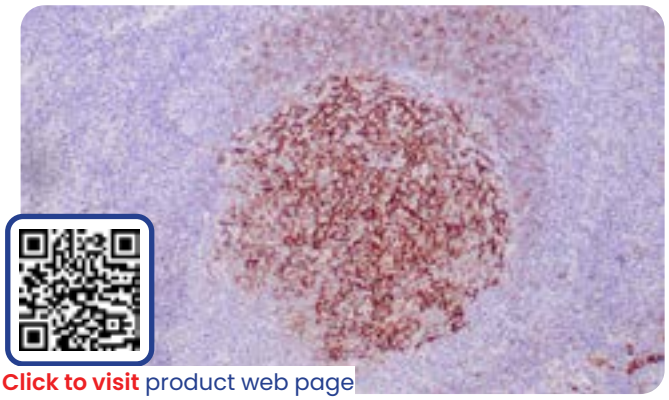
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

CD23 (clone ZR225)

Recombinant. ZR225 targets CD23 (FCE2), a type II integral membrane glycoprotein that functions as a low-affinity IgE receptor. Expressed on mature B cells, monocytes, eosinophils, and dendritic cells, it mediates IgE-dependent cytotoxicity and interacts with CD40 to assist in antigen presentation. Oligomeric binding increases its affinity, while its secreted truncated form acts as a mitogen. This antibody successfully detects neoplastic cells in chronic lymphocytic leukemia and select centroblastic/centrocytic lymphomas in hematopathology.

Species: Rabbit Monoclonal **Cat#:** Z2516 ›››

IHC: Human tonsil stained with ZR225



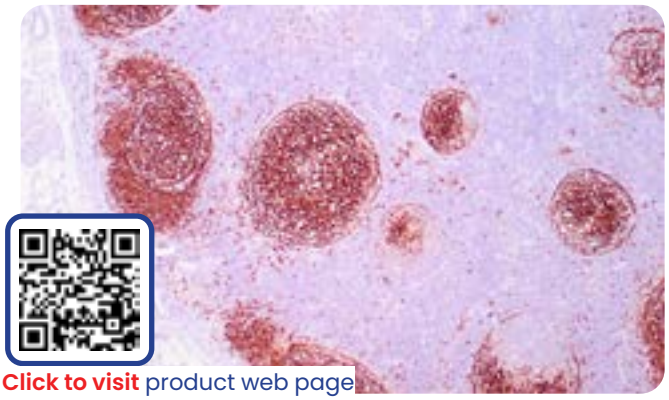
Click to visit product web page

CD23 (clone ZM209)

Recombinant. ZM183 recognizes CD23 (FCE2), a type II integral membrane glycoprotein that functions as a low-affinity IgE receptor. It is expressed on mature B cells, monocytes, and follicular dendritic cells, with significant upregulation during EBV infections. In small B-cell lymphoproliferative disorder panels, CD23 is characteristically positive in chronic lymphocytic leukemia—highlighting proliferation centers—but negative in mantle cell lymphoma. Additionally, it outlines benign follicular dendritic cell networks and helps identify rare dendritic cell tumors.

Species: Mouse Monoclonal **Cat#:** Z2545 ›››

IHC: Human tonsil stained with ZM209



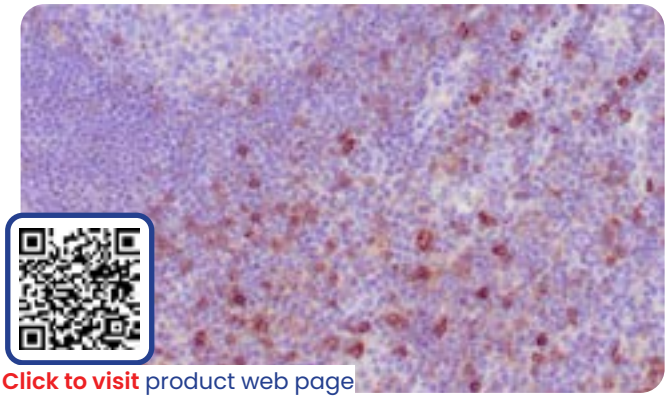
Click to visit product web page

CD25 (clone ZM466)

Recombinant. ZM466 recognizes CD25, also known as the Interleukin-2 receptor alpha chain (IL-2R). This cell-surface protein modulates T-cell activity and function to regulate normal immune responses. In diagnostic pathology, evaluating CD25 expression provides a highly reliable tool for distinguishing neoplastic mast cell aggregates from benign, reactive proliferations. Furthermore, CD25 is prominently overexpressed in specific hematologic malignancies, including adult T-cell leukemia/lymphoma (ATLL) and certain Hodgkin lymphoma variants.

Species: Mouse Monoclonal **Cat#:** Z2817 ›››

IHC: Human spleen stained with ZM466



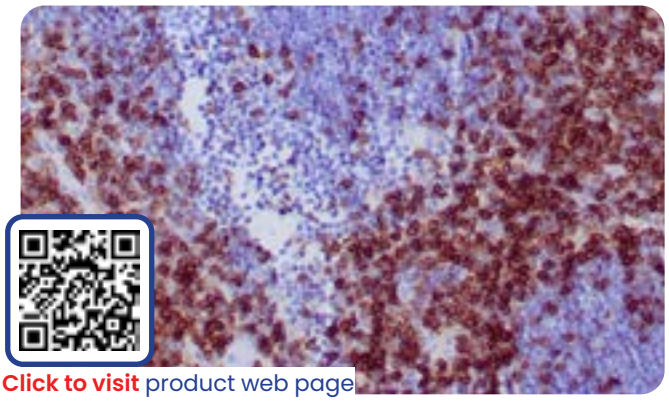
Click to visit product web page

CD27 (clone ZR402)

Recombinant. ZR402 recognizes CD27 (TNFRSF7), a disulfide-linked 120kDa dimeric transmembrane phosphoglycoprotein triggered by its unique ligand CD70. It drives T-cell co-stimulation, B-cell activation, NF-κB/JNK pathways, and apoptosis. Expressed on peripheral T cells, medullary thymocytes, memory B cells, and NK cells, CD27-positive tumor-infiltrating lymphocytes predict poorer survival in renal cell carcinoma. Additionally, soluble CD27 functions as an unfavorable prognostic marker in acute myeloid leukemia and high-risk B-cell progenitor acute lymphoblastic leukemia.

Species: Rabbit Monoclonal **Cat#:** Z2758 ›››

IHC: Human thymus stained with ZR402



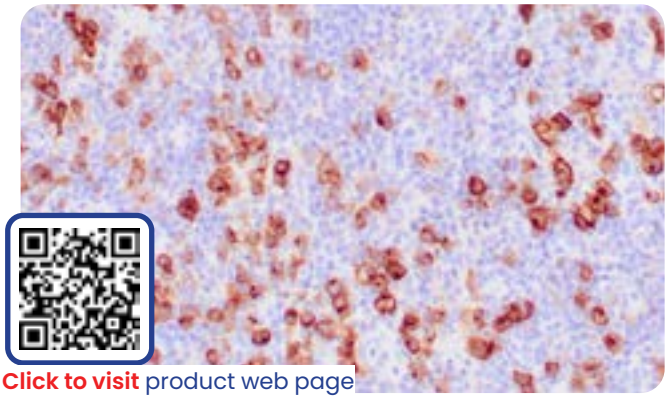
Click to visit product web page

CD30 (clone ZR248)

Recombinant. ZR248 targets CD30/Ki-1, a membrane-bound, phosphorylated 105/120kDa glycoprotein processed from a 90kDa Golgi precursor. It is highly expressed by mononuclear Hodgkin and multinucleated Reed-Sternberg cells in Hodgkin's disease, anaplastic large cell lymphomas, and a subset of activated T and B cells. In diagnostic pathology, this antibody serves as a crucial marker to differentiate large cell lymphomas derived from activated lymphoid cells from histiocytic malignancies. Approximately one-third of these lymphomas lack CD45 expression.

Species: Rabbit Monoclonal **Cat#:** Z2489 >>>

IHC: Human Hodgkin lymphoma stained with ZR248



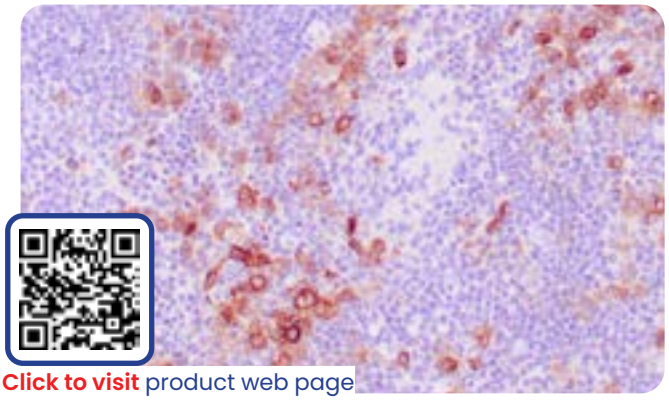
Click to visit product web page

CD30 (clone Ber-H2)

Ber-H2 recognizes CD30/Ki-1, a membrane-bound, phosphorylated 105/120kDa glycoprotein processed from a 90kDa precursor. It is strongly expressed by mononuclear Hodgkin and multinucleated Reed-Sternberg cells in Hodgkin's disease, anaplastic large cell lymphomas, and a subset of activated T and B cells. In diagnostic surgical pathology, CD30 distinguishes large cell lymphomas of activated lymphoid origin from histiocytic malignancies, precursor lymphomas, or anaplastic carcinomas. Notably, about one-third of these CD30-positive lymphomas lack CD45 expression.

Species: Mouse Monoclonal **Cat#:** Z2101 >>>

IHC: Human Hodgkin lymphoma stained with Ber-H2



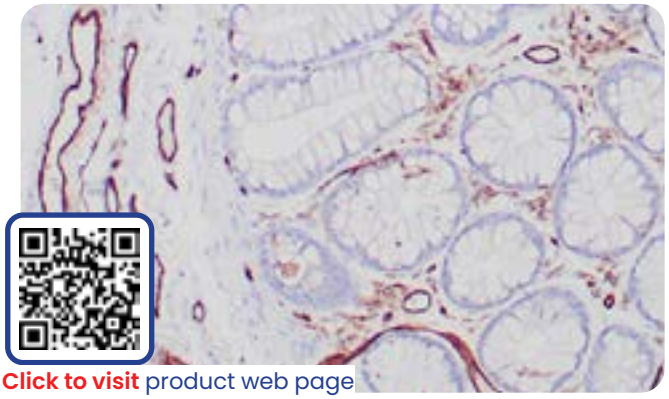
Click to visit product web page

CD31 (clone ZR274)

Recombinant. ZR274 recognizes CD31, a transmembrane glycoprotein membership of the immunoglobulin supergene family of adhesion molecules. Expressed by hematopoietic stem cells, it serves to identify and concentrate cells for bone marrow transplantation. This highly specific marker highlights normal, benign, and malignant vascular endothelial cells while rarely staining non-vascular tumors. Evaluating CD31 expression levels helps determine the degree of tumor angiogenesis, where elevated staining levels imply rapid tumor growth and potentially predict disease recurrence.

Species: Rabbit Monoclonal **Cat#:** Z2725 >>>

IHC: Human thyroid tissue stained with ZR274



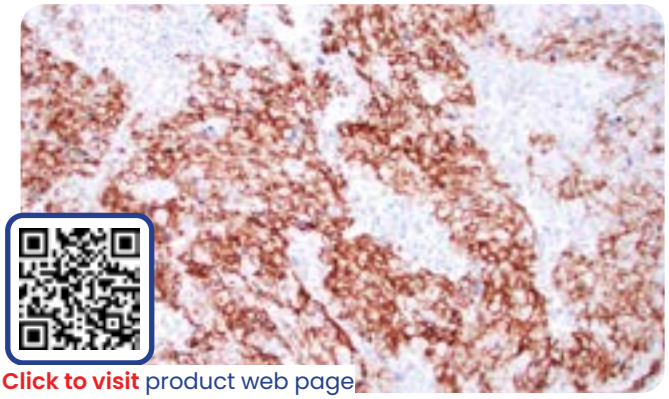
Click to visit product web page

CD31 (clone JC70A)

Recombinant. JC70A recognizes CD31, a cell surface glycoprotein involved in cellular signaling and adhesion pathways. The JC/70A clone reacts strongly with endothelial cells in normal tissues, as well as in benign and malignant vascular proliferations. Beyond endothelium, it highlights megakaryocytes, platelets, and occasionally plasma cells, while displaying weak reactivity with neutrophils, peripheral T cells, and mantle zone B cells. Consequently, this antibody serves as an invaluable diagnostic tool for evaluating vascular tumors and measuring tumor angiogenesis.

Species: Mouse Monoclonal **Cat#:** Z2136 >>>

IHC: Human thyroid tissue stained with JC70A



Click to visit product web page

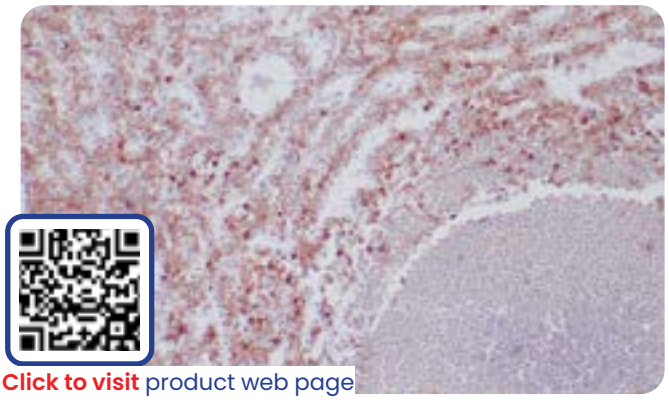
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

CD33 (clone PWS44)

PWS44 provides exceptional sensitivity and specificity for myelomonocytic lineages, making it highly advantageous for diagnosing myeloid sarcoma, minimally differentiated acute myeloid leukemia (AML-M0), and acute monocytic leukemia (AML-M5). CD33 (gp67, or siglec-3) is a 67 kDa glycosylated transmembrane protein belonging to the sialic acid-binding immunoglobulin-like lectin family. Analysis of CD33 expression in paraffin-embedded bone marrow biopsy specimens provides an alternative evaluation method when initial flow cytometry studies are unavailable.

Species: Mouse Monoclonal **Cat#:** Z2232 ›››

IHC: Human bone marrow acute myeloid leukemia stained with PWS44



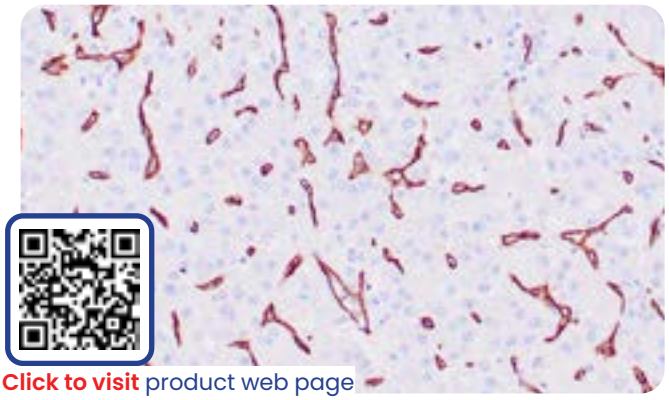
Click to visit product web page

CD34 (clone QBEnd-10)

QBEnd-10 recognizes CD34, a single-chain transmembrane glycoprotein selectively expressed on Human lymphoid and myeloid hematopoietic progenitor cells. Beyond measuring vascular neoangiogenesis to predict tumor recurrence, CD34 is helpful to distinguish liver lesions from hepatocellular carcinoma and differentiate soft tissue neoplasms. It effectively separates Kaposi sarcoma, dermatofibrosarcoma protuberans, and solitary fibrous tumors from CD34-negative mimics like dermatofibroma, desmoplastic mesothelioma, and T-cell acute lymphoblastic leukemia, while identifying blasts in general.

Species: Mouse Monoclonal **Cat#:** Z2063›››

IHC: Human thyroid tissue stained with QBEnd-10



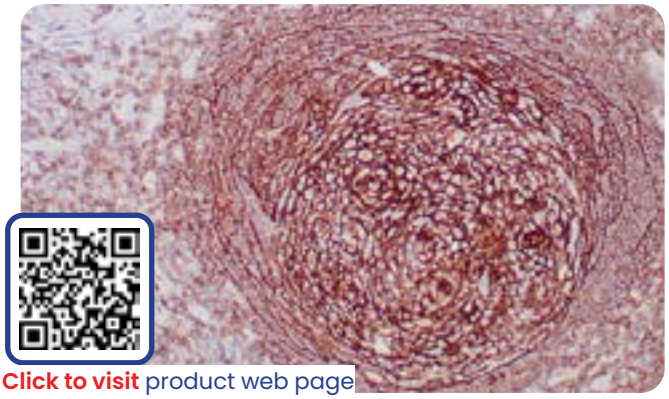
Click to visit product web page

CD35 (clone ZR58)

Recombinant. ZR58 recognizes CD35 (Complement Receptor 1), a cell membrane-bound, monomeric glycoprotein that serves as the cellular receptor for C3b and C4b components to clear foreign macromolecules. Expressed on erythrocytes, B cells, select T cells, monocytes, granulocytes, and glomerular podocytes, CD35 labels normal follicular dendritic reticulum cells. Consequently, this mature B-cell marker functions as an essential diagnostic tool for identifying follicular dendritic cell tumors and sarcomas within tissue sections.

Species: Rabbit Monoclonal **Cat#:** Z2368 ›››

IHC: Human tonsil stained with ZR58



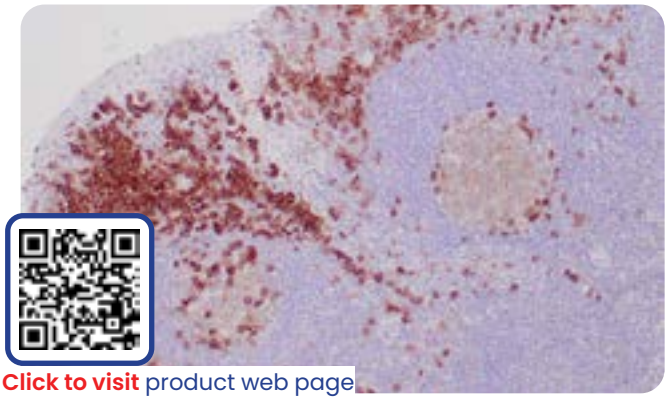
Click to visit product web page

CD38 (clone ZR351)

Recombinant. ZR351 recognizes CD38, a transmembrane activation marker highly expressed on thymocytes, activated T cells, and terminally differentiated plasma cells. It appears on cells from multiple myeloma, acute lymphocytic leukemia, and select carcinomas. While the absence of CD38 on CD34+ cells marks bone marrow hematopoietic stem cells, its positive expression carries vital prognostic value, predicting a more aggressive clinical course in chronic lymphocytic leukemia and hairy cell leukemia but a favorable prognosis in acute myeloid leukemia.

Species: Rabbit Monoclonal **Cat#:** Z2610 ›››

IHC: Human tonsil stained with ZR351



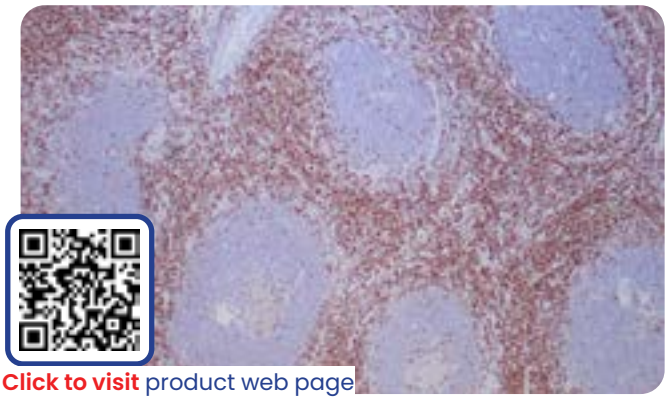
Click to visit product web page

CD43 (clone ZR403)

Recombinant. ZR403 recognizes CD43 (leukosialin), an important pan T-cell marker of 95/115/135kDa mediating endothelial leukocyte adhesion. Expressed in 70–90% of T-cell and 22–37% of B-cell lymphomas, it is absent in reactive B-cells. Combined with anti-CD20, co-expression in lymphoid infiltrates strongly favors malignant lymphoma over benign processes. This antibody effectively classifies subtypes of low-grade B-cell and T-cell lymphomas, diagnoses myeloid sarcoma, and differentiates pulmonary MALT lymphoma from negative lymphoid hyperplasia.

Species: Rabbit Monoclonal **Cat#:** Z2759 ›››

IHC: Human tonsil stained with ZR403



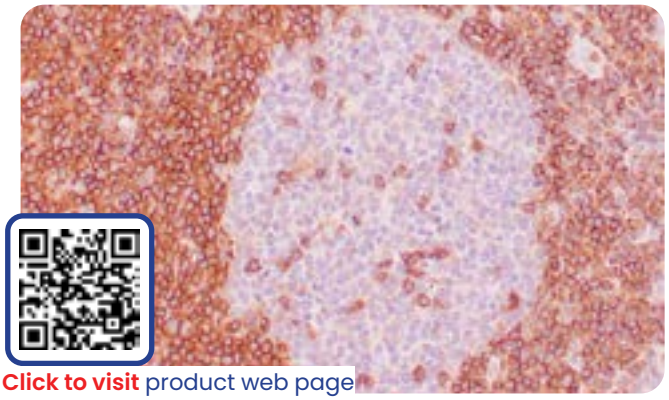
Click to visit product web page

CD43 (clone DF-T1)

DF-T1 recognizes CD43 (leukosialin), a cell surface glycoprotein expressed on all thymocytes and T-cells. Involved in activating T cells, B cells, NK cells, and monocytes, it serves as a pan T-cell marker mediating neutrophil adhesion to endothelium via E-selectin ligands. In diagnostic pathology, CD43 helps identify myeloid (granulocytic) sarcoma, classifies subtypes of T-cell and low-grade B-cell lymphomas, and differentiates pulmonary MALT lymphoma (CD20+ CD43+) from completely negative lymphoid hyperplasia.

Species: Mouse Monoclonal **Cat#:** Z2032 ›››

IHC: Human lymph node stained with DF-T1



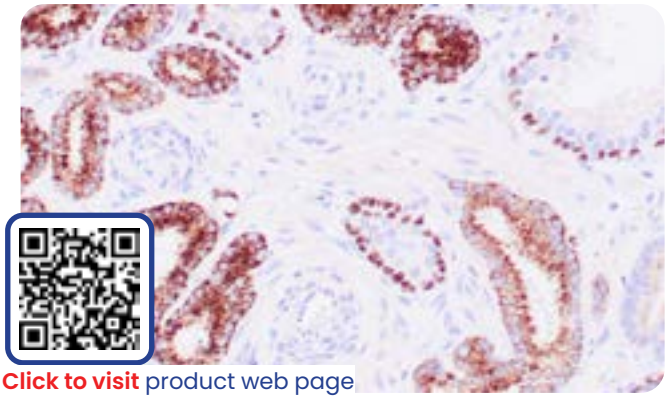
Click to visit product web page

CD44 (clone ZR184)

Recombinant. ZR184 recognizes CD44, an 80–95kDa cell surface glycoprotein expressed on lymphocytes, monocytes, and granulocytes. Its trypsin-resistant epitope interferes with lymphocyte binding to mucosal, synovial, and lymph node endothelium. While the standard variant (CD44s) dominates hematopoiesis, higher molecular weight epithelial variants (CD44v) regulate intercellular adhesion and stromal binding. In clinical surgical pathology, CD44 immunostaining serves as an essential tool for discriminating urothelial transitional cell carcinoma in-situ from non-neoplastic urothelium.

Species: Rabbit Monoclonal **Cat#:** Z2679 ›››

IHC: Human squamous cell carcinoma stained with ZR184



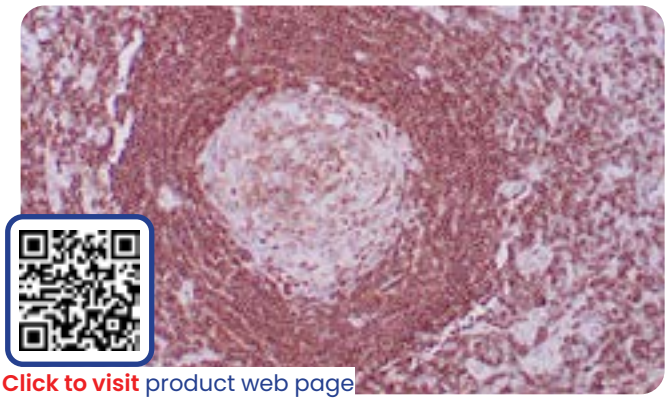
Click to visit product web page

CD45RA (clone ZR118)

Recombinant. ZR118 targets CD45RA, a heavily glycosylated single-chain transmembrane protein isoform produced by alternative splicing on chromosome 1q31-32. Exclusively restricted to hematolymphoid lineages, it is expressed across precursor elements, mature B and T lymphocytes, granulocytes, histiocytes, and dendritic networks. Testing positive in 90% of leukemias and malignant lymphomas, it serves as a primary panel marker to identify hematolymphoid differentiation, while expression loss in precursor B-cell neoplasms indicates negative prognosis.

Species: Rabbit Monoclonal **Cat#:** Z2681 ›››

IHC: Human lymph node stained with ZR118



Click to visit product web page

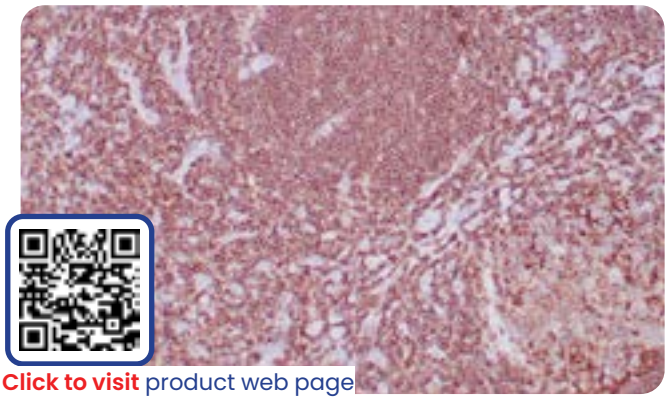
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

CD45RB (LCA) (clone ZR361)

Recombinant. ZR361 recognizes CD45RB (LCA), an exon 5 alternative splicing variant that functions as a phosphotyrosine phosphatase. Absent in Langerhans cells, platelets, plasma cell tumors, and select anaplastic or lymphoblastic lymphomas, it reacts weakly with B cells, monocytes, and granulocytes. This marker is highly useful for differentiating lymphoid tumors from non-hematopoietic undifferentiated neoplasms. Additionally, tracking CD4+ CD45RB-high T cells helps evaluate inflammatory bowel disease pathogenesis, where they secrete pro-inflammatory cytokines.

Species: Rabbit Monoclonal **Cat#:** Z2737 >>>

IHC: Human lymph node stained with ZR361



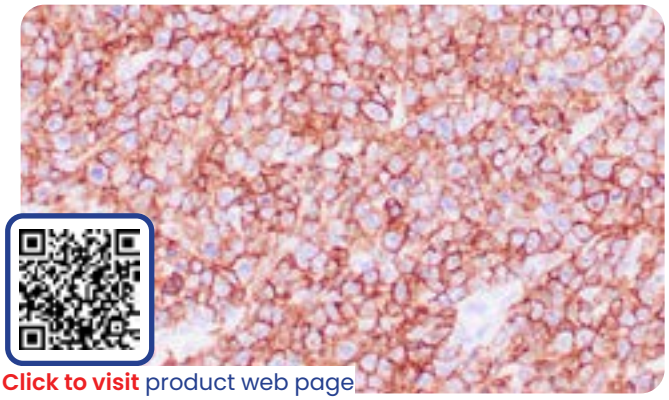
Click to visit product web page

CD45RB (LCA) Cocktail (clone 2B11/PD7-26)

Mouse cocktail recognizes CD45RB (LCA), a leukocyte common antigen belonging to a family of four membrane glycoprotein isoforms (220, 205, 190, 180kDa). Expressed strictly on hematopoietic cells, it is completely absent from non-hematopoietic cell lines and tissues. The intracellular portion of these molecules exhibits protein phosphatase activity to regulate transmembrane signals. Consequently, this specialized antibody cocktail serves as an invaluable diagnostic tool for the differential identification of lymphoid tumors from non-hematopoietic undifferentiated neoplasms.

Species: Mouse Monoclonal **Cat#:** Z2093 >>>

IHC: Human diffuse large B cell lymphoma stained with 2B11/PD7-26



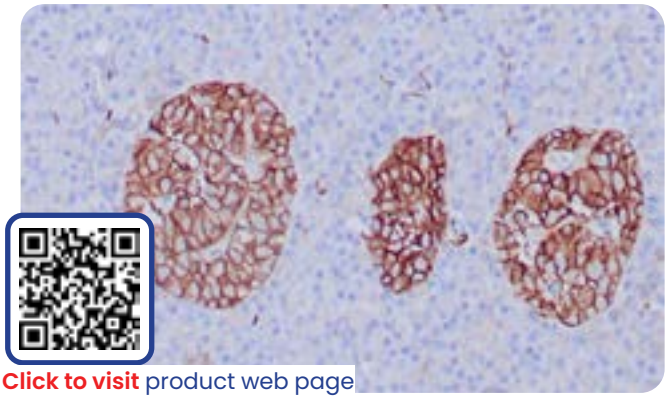
Click to visit product web page

CD56 (clone ZR421)

Recombinant. ZR421 targets an extracellular domain close to the transmembrane region of CD56 (NCAM). This antibody recognizes two neural cell adhesion molecule proteins across neuroectodermal tissues and neoplasms, including retinoblastomas, medullo-blastomas, astrocytomas, neuroblastomas, and small cell carcinomas. It also reacts with rhabdomyosarcomas and plays an important role in diagnosing nasal NK/T-cell lymphomas.

Species: Rabbit Monoclonal **Cat#:** Z2777 >>>

IHC: Human neuroendocrine carcinoma stained with ZR421



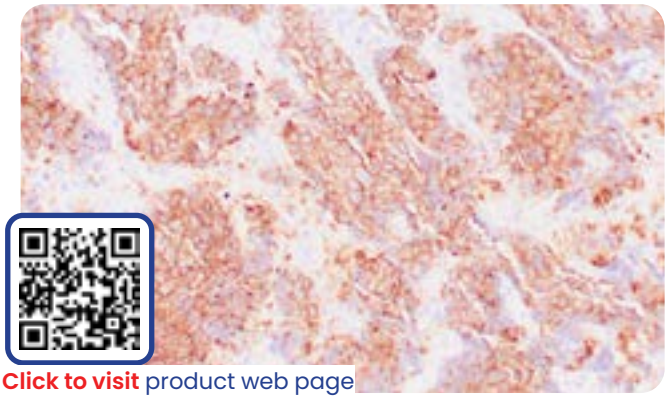
Click to visit product web page

CD56 (clone 123C3.D5)

Recombinant. 123C3.D5 recognizes the 135kDa basic isoform of CD56 (NCAM), a neural cell adhesion molecule produced by alternative splicing. This glycosylated protein is expressed on natural killer (NK) cells, neuroectodermal tissues, and mesodermal rhabdomyosarcomas. It serves as a sensitive marker for NK lymphomas, select T-cell lymphomas, small cell carcinomas, and carcinoid tumors. Because it lacks total specificity for neuroendocrine lineages, it must always be paired with synaptophysin and chromogranin for accurate diagnosis.

Species: Mouse Monoclonal **Cat#:** Z2038 >>>

IHC: Human neuroendocrine carcinoma stained with 123C3.D5



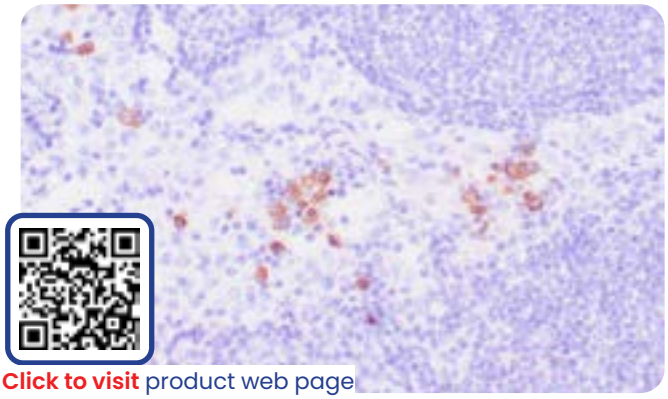
Click to visit product web page

CD57 (clone NK-1)

NK1 recognizes CD57 (Leu7), a cell adhesion glycoprotein that defines replicative senescence phenotypes in HIV-specific CD8+ T cells. Expressed on T cells, neuroectodermal tissues, and NK cells, it serves as a critical marker for NK proliferations and neuroendocrine tumors. Clinically, CD57 aids in distinguishing prostatic adenocarcinoma from high-grade urothelial carcinoma. Furthermore, it identifies specific leukemias, autoimmune lymphoproliferative syndrome, and diverse nerve sheath lesions where expression decreases with tumor grade.

Species: Mouse Monoclonal **Cat#:** Z2111 ›››

IHC: Human tonsil stained with NK-1



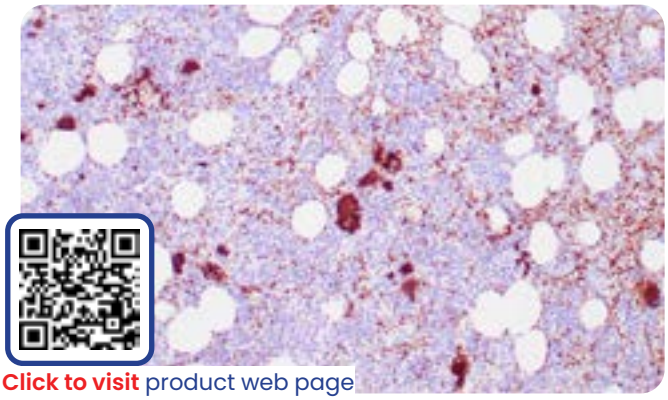
Click to visit product web page

CD61 (clone ZM33)

Recombinant. ZM33 recognizes CD61 (GPIIIa), a membrane glycoprotein found on megakaryocytes, platelets, and their precursors. Also known as beta 3 integrin, CD61 associates with CD41 to form a heterodimeric complex essential for normal platelet function, binding matrix proteins like fibrinogen to promote blood clotting and platelet aggregation. It identifies platelet thrombi and helps detect megakaryocytic leukemia. Pathologically, CD61 can promote tumor invasion, and its upregulation directly correlates with poor survival across multiple cancers.

Species: Mouse Monoclonal **Cat#:** Z2337 ›››

IHC: Human bone marrow stained with ZM33



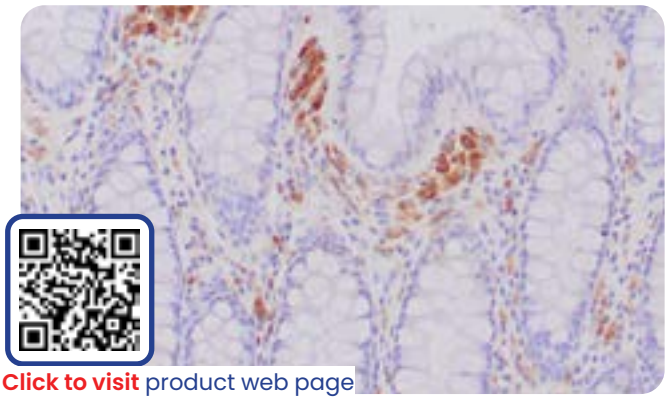
Click to visit product web page

CD68 (clone ZR302)

Recombinant. ZR302 recognizes CD68, a 110kDa lysosomal-associated transmembrane glycoprotein primarily utilized as a marker to identify histiocytes and histiocytic tumors. Chiefly localizing to lysosomes and endosomes, its expression is upregulated by inflammatory stimuli, enabling it to bind apoptotic cells, phosphatidylserine, and oxidized low-density lipoproteins. It highlights macrophages across diverse Human tissues, including Kupffer cells, lung alveoli, bone marrow, and splenic red pulp. The antibody also reacts with myeloid precursors, providing strong granular cytoplasmic staining in chronic and acute myeloid leukemias.

Species: Rabbit Monoclonal **Cat#:** Z2732 ›››

IHC: Human colon stained with ZR302



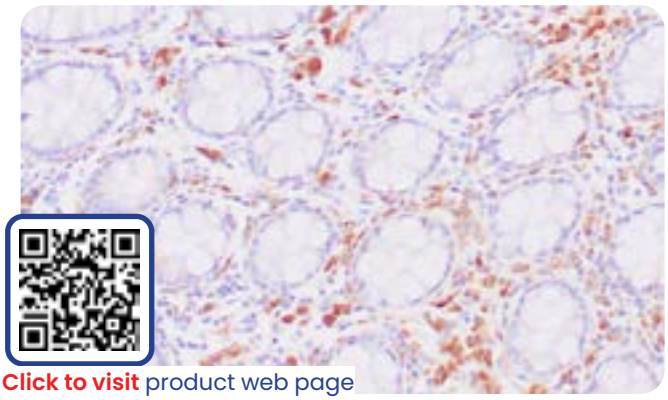
Click to visit product web page

CD68 (clone KP1)

Recombinant. KP1 recognizes CD68, a 110kDa lysosomal-associated transmembrane glycoprotein primarily utilized as a marker to identify histiocytes and histiocytic tumors. Chiefly localizing to lysosomes and endosomes, its expression is upregulated by inflammatory stimuli, enabling it to bind apoptotic cells, phosphatidylserine, and oxidized low-density lipoproteins. It highlights macrophages across diverse Human tissues, including Kupffer cells, lung alveoli, bone marrow, and splenic red pulp. The antibody also reacts with myeloid precursors, providing strong granular cytoplasmic staining in chronic and acute myeloid leukemias.

Species: Mouse Monoclonal **Cat#:** Z2071 ›››

IHC: Human colon stained with KP1



Click to visit product web page

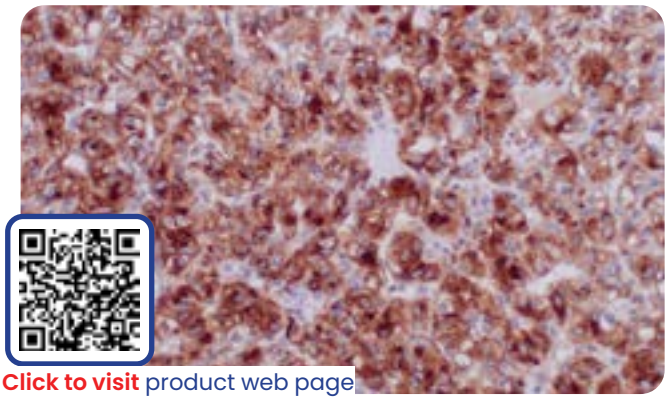
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

CD70 (clone ZR469)

Recombinant. ZR469 recognizes CD70, a cytokine belonging to the tumor necrosis factor ligand family that binds to the TNFRSF27/ CD27 receptor. Present as a 30kDa surface antigen on activated but not resting T and B lymphocytes, CD70 induces the proliferation of co-stimulated T cells, enhances cytotoxic T-cell generation, and contributes directly to T-cell activation. It is also reported to regulate B-cell activation, the cytotoxic function of natural killer cells, and general immunoglobulin synthesis within the Human immune system.

Species: Rabbit Monoclonal **Cat#:** Z2829 ›››

IHC: Human clear cell renal cell carcinoma stained with ZR469



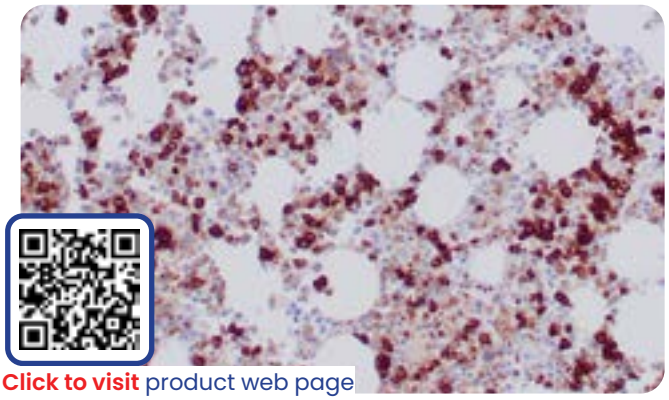
Click to visit product web page

CD71 (clone ZR422)

Recombinant. ZR422 targets CD71, a 180–190kDa disulfide-bonded homodimeric glycoprotein functioning as the cell surface transferrin receptor. It demonstrates high specificity without cross-reacting with related proteins, binding specifically to the serum iron transport protein transferrin. This receptor is broadly distributed throughout various carcinomas, sarcomas, leukemias, and lymphomas. Because CD71 expression is closely associated with cell proliferation in normal and neoplastic tissues, it functions as a helpful biomarker for predicting clinical behavior.

Species: Rabbit Monoclonal **Cat#:** Z2778 ›››

IHC: Human bone marrow stained with ZR422



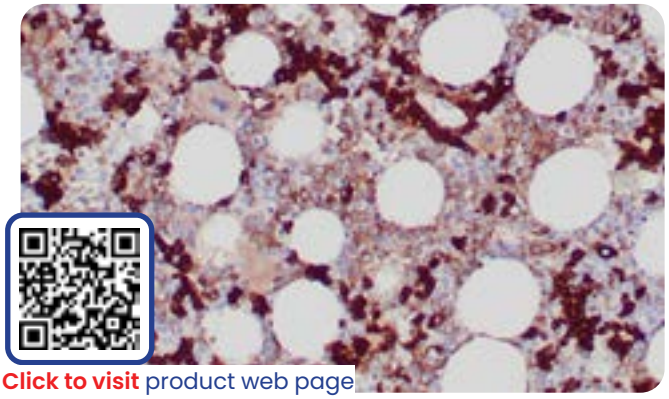
Click to visit product web page

CD71 (clone ZM136)

Recombinant. ZR469 recognizes CD71, a 180–190kDa disulfide-bonded homodimeric glycoprotein identified as the cell surface transferrin receptor. Exhibiting high specificity with no cross-reaction against related proteins, it binds the serum iron transport protein transferrin. The CD71 receptor is broadly distributed across carcinomas, sarcomas, leukemias, and lymphomas. Because expression directly correlates with cellular proliferation in normal and neoplastic tissues, evaluating its staining levels serves as a helpful indicator for predicting clinical behavior.

Species: Mouse Monoclonal **Cat#:** Z2685 ›››

IHC: Human bone marrow stained with ZM136



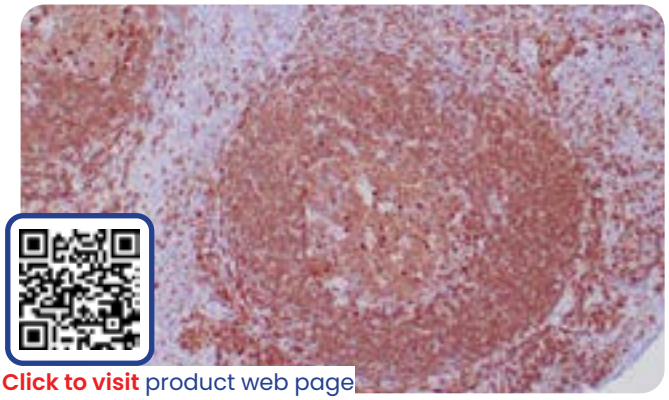
Click to visit product web page

CD79a (clone JCB117)

Recombinant. JCB117 recognizes CD79a, an intracellular protein component expressed from the pre-B cell stage until the plasma cell stage where it is found as an intracellular component. CD79a exists as a disulfide-linked heterodimer with CD79b polypeptides, which non-covalently associates with membrane immunoglobulins to construct the functional B-cell receptor complex. This lineage marker is consistently demonstrated across the majority of acute leukemias of precursor B-cell type, B-cell lines, B-cell lymphomas, and select myelomas, ensuring reliable clinical pathology profiling.

Species: Mouse Monoclonal **Cat#:** Z2427 ›››

IHC: Human tonsil stained with JCB117



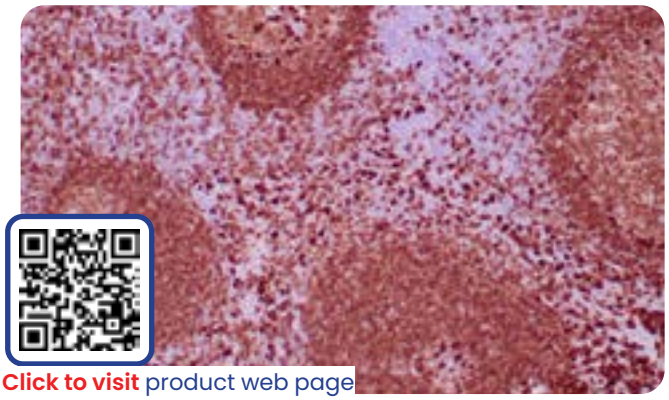
Click to visit product web page

CD79a (clone ZR237)

Recombinant. ZR237 recognizes CD79a, an intracellular protein component first expressed at the pre-B cell stage that persists until terminal plasma cell differentiation. CD79a forms a disulfide-linked heterodimer with CD79b (B29) polypeptides, non-covalently associating with membrane-bound immunoglobulins on B cells to assemble the functional B-cell antigen receptor complex. This marker is expressed across most acute leukemias of precursor B-cell type, B-cell lines, B-cell lymphomas, and select myelomas, ensuring reliable lineage identification.

Species: Rabbit Monoclonal **Cat#:** Z2533 >>>

IHC: Human tonsil stained with ZR237



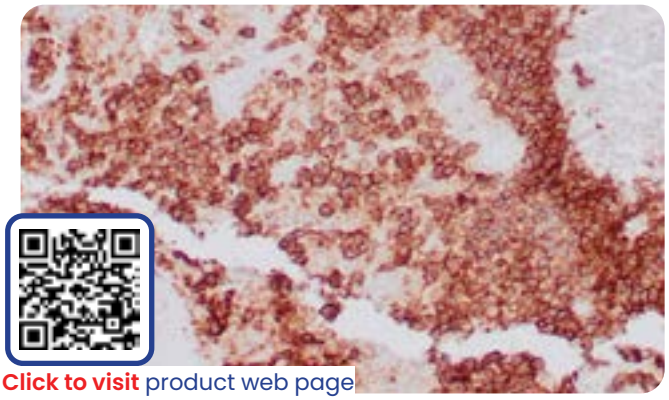
Click to visit product web page

CD99 (clone ZR423)

Recombinant. ZR423 targets CD99 (MIC2 or E2 antigen), a 27–32kDa sialoglycoprotein encoded by the pseudo-autosomal MIC2 gene on the X and Y chromosomes. Alternative splicing produces 30 and 32kDa protein products. CD99 drives homotypic T-cell aggregation, T-cell receptor and MHC upregulation, immature thymocyte apoptosis, and leukocyte diapedesis. It is expressed on thymocytes, granulosa cells, Sertoli cells, and pancreatic islet cells, serving as an essential diagnostic marker for Ewing's sarcoma.

Species: Rabbit Monoclonal **Cat#:** Z2779 >>>

IHC: Human Ewing's sarcoma stained with ZR423



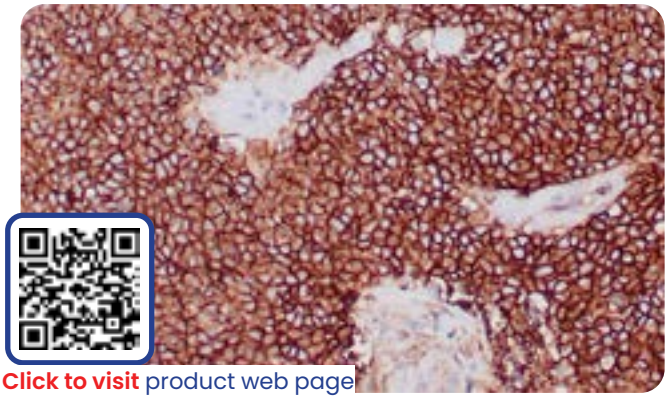
Click to visit product web page

CD99 (clone ZM139)

Recombinant. ZM139 recognizes CD99 (MIC2 or E2 antigen), a 27–32kDa sialoglycoprotein encoded by the pseudo-autosomal MIC2 gene on the X and Y chromosomes. Alternative splicing yields distinct 30 and 32kDa protein products. CD99 mediates homotypic T-cell aggregation, T-cell receptor and MHC upregulation, thymocyte apoptosis, and leukocyte diapedesis. It localizes to thymocyte membranes, ovarian granulosa cells, testicular Sertoli cells, and pancreatic islet cells, but is highly expressed in Ewing's sarcoma.

Species: Mouse Monoclonal **Cat#:** Z2686 >>>

IHC: Human Ewing's sarcoma stained with ZM139



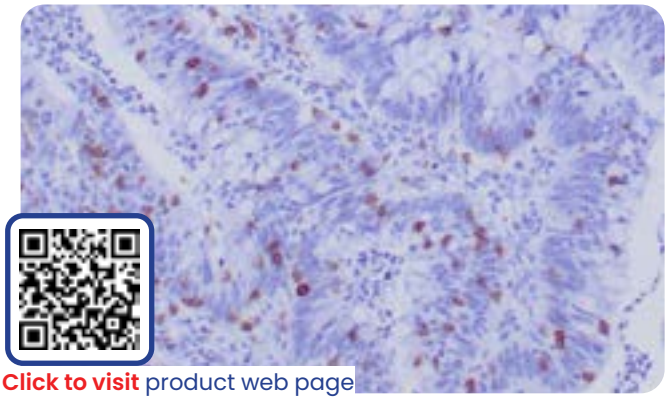
Click to visit product web page

CD103 (clone ZR404)

Recombinant. ZR404 recognizes CD103 (alpha-E integrin), an integrin subunit that pairs with the beta-7 subunit to form the alpha-E/beta-7 complex. This complex mediates leukocyte adhesion, migration, and lymphocyte homing by interacting with epithelial E-cadherin. CD103 is expressed on over 95% of intraepithelial CD8+ T cells, mucosa-associated T cells, hairy cell leukemia cells, and T-cell lymphomas. It serves as an extremely useful diagnostic tool for hairy cell leukemia panels in surgical pathology.

Species: Rabbit Monoclonal **Cat#:** Z2760 >>>

IHC: Human colon carcinoma stained with ZR404



Click to visit product web page

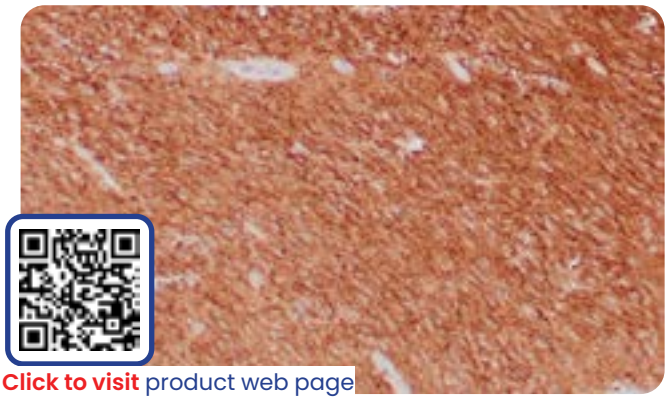
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

CD117 (clone ZR424)

Recombinant. ZR424 recognizes CD117, a 145kDa protein found on diverse tumor cells including thyroid carcinomas, melanoma, and various adenocarcinomas. While expressed widely, this antibody proves exceptionally useful in diagnostic surgical pathology for differentiating gastrointestinal stromal tumors from Kaposi's sarcoma, smooth muscle tumors, fibromatosis, and neural tumors of the GI tract. Additionally, this reliable marker highlights myeloblasts in bone marrow biopsies and clot sections for precise lineage determination.

Species: Rabbit Monoclonal **Cat#:** Z2780 ›››

IHC: Human GIST stained with ZR424



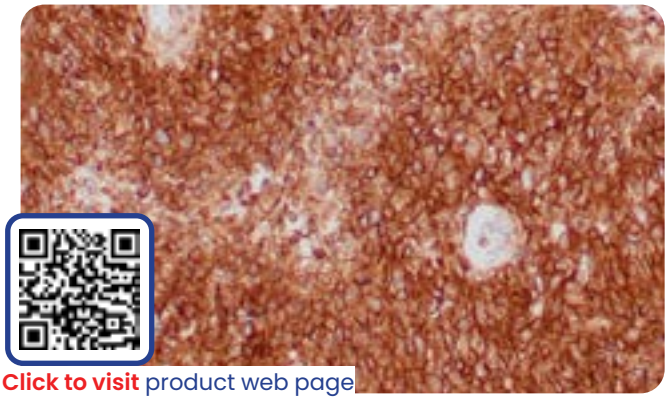
Click to visit product web page

CD117 (clone ZM321)

Recombinant. ZM321 recognizes CD117, a 145kDa protein found on diverse tumor cells including thyroid carcinomas, melanoma, and various adenocarcinomas. While expressed widely, this antibody proves exceptionally useful in diagnostic surgical pathology for differentiating gastrointestinal stromal tumors from Kaposi's sarcoma, smooth muscle tumors, fibromatosis, and neural tumors of the GI tract. Additionally, this reliable marker highlights myeloblasts in bone marrow biopsies and clot sections for precise lineage determination.

Species: Mouse Monoclonal **Cat#:** Z2628›››

IHC: Human GIST stained with ZM321



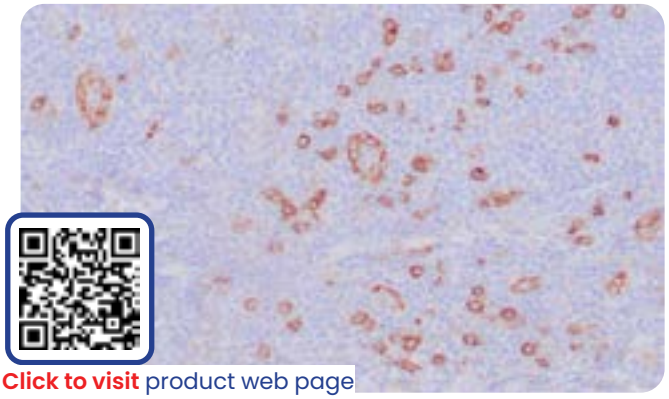
Click to visit product web page

CD123 (clone ZR425)

Recombinant. ZR425 recognizes CD123, an interleukin 3 specific subunit of a heterodimeric cytokine receptor. Comprising a ligand-specific alpha subunit and a shared signal-transducing beta subunit, this receptor interacts with IL-3, GM-CSF, and IL-5. Binding depends strictly on the beta subunit, activated by CD123 ligand binding for essential IL-3 biological activities. Notably, CD123 and the CSF2RA gene cluster within an X-Y pseudo-autosomal region on chromosomes X or Y.

Species: Rabbit Monoclonal **Cat#:** Z2781 ›››

IHC: Human tonsil stained with ZR425



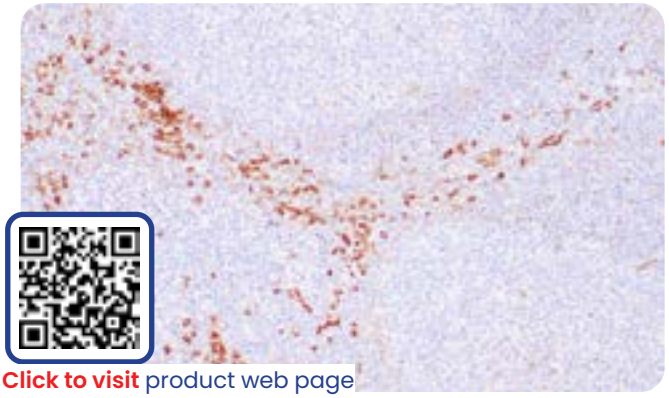
Click to visit product web page

CD123 (clone ZM80)

Recombinant. ZM80 recognizes CD123, an IL-3 receptor alpha chain associated with a 120-140kDa beta subunit. It regulates hematopoietic progenitor growth, blocks IL-3 receptors, and inhibits acute myeloid leukemia cell proliferation, basophil histamine release, and neutrophil transmigration. It reacts with plasmacytoid dendritic cells, crucial for antiviral immunity and producing type I interferons. Furthermore, this antibody is useful in diagnosing Kikuchi disease, hyaline vascular Castleman disease, lupus, and primary cutaneous marginal zone B-cell lymphoma.

Species: Mouse Monoclonal **Cat#:** Z2390›››

IHC: Human tonsil stained with ZM80



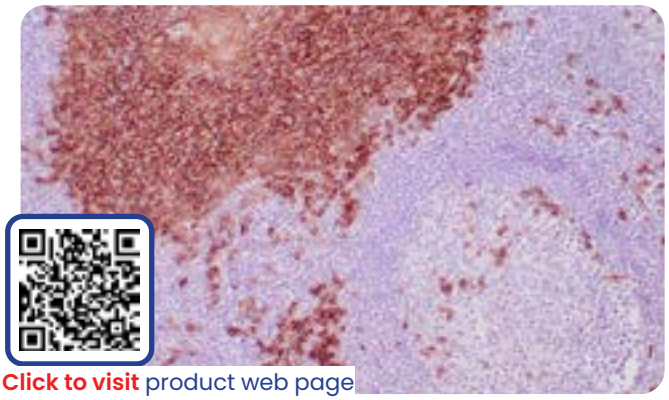
Click to visit product web page

CD138 (clone ZR251)

Recombinant. ZR251 recognizes CD138, a syndecan-1 transmembrane protein binding heparan and chondroitin sulfate molecules to control cell growth, differentiation, adhesion, and migration. It is predominantly expressed on mature plasma cells, early pre-B cells, squamous epithelial cells, and various carcinomas. Conversely, other hematolymphoid cells and mature mesenchymal tissues remain negative. This antibody strongly highlights practically all plasma cell malignancies, making it an essential diagnostic tool for precise lineage determination.

Species: Rabbit Monoclonal **Cat#:** Z2490 >>>

IHC: Human tonsil stained with ZR251



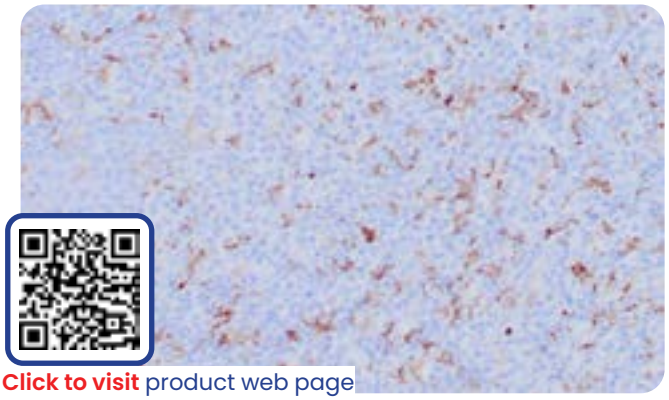
Click to visit product web page

CD163 (clone ZR426)

Recombinant. ZR426 recognizes CD163, a 140kDa acute phase-regulated transmembrane protein mediating haptoglobin-hemoglobin complex endocytosis. Expressed weakly on monocytes and strongly on tissue macrophages and histiocytes, it helps distinguish synovial macrophages from synovial intimal fibroblasts in rheumatoid arthritis superior to anti-CD68. It shows increased levels in microbial infections and myelomonocytic leukemias. This marker selectively identifies monocytes and macrophages at specific differentiation stages, diagnosing myelomonocytic or monocytic leukemia and true histiocytic neoplasms.

Species: Rabbit Monoclonal **Cat#:** Z2782 >>>

IHC: Human lymph node stained with ZR426



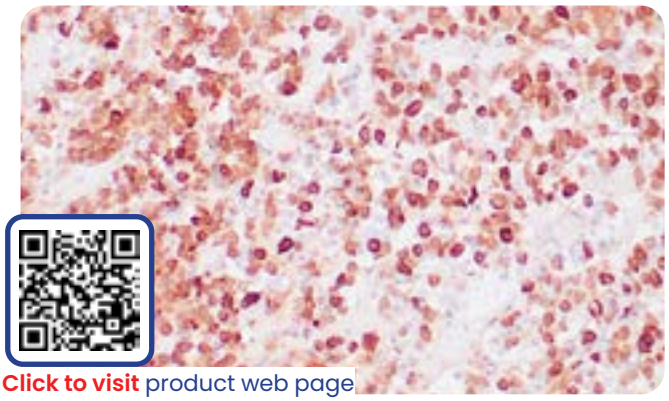
Click to visit product web page

CD163 (clone ZM29)

Recombinant. ZM29 recognizes CD163, an acute phase-regulated transmembrane protein mediating endocytosis of haptoglobin-hemoglobin complexes. It is expressed weakly on monocytes and strongly on tissue macrophages and histiocytes. This marker helps distinguish synovial macrophages from synovial intimal fibroblasts in rheumatoid arthritis with superiority to anti-CD68. It shows increased expression in microbial infections and myelomonocytic leukemias. Consequently, it selectively identifies monocytes or macrophages, diagnosing myelomonocytic or monocytic leukemia and neoplasms of true histiocytic origin.

Species: Mouse Monoclonal **Cat#:** Z2361 >>>

IHC: Human lymph node stained with ZM29



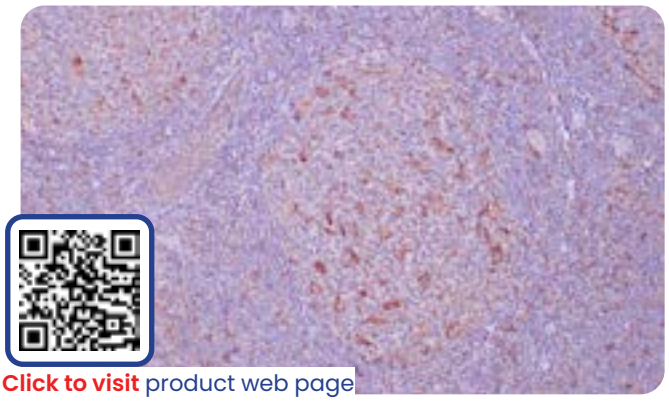
Click to visit product web page

CD205 (clone ZM360)

ZM360 recognizes CD205, a type I transmembrane glycoprotein and is a member of the C-type lectin receptor family. CD205 is robustly expressed and highly prevalent in a variety of solid malignancies including pancreatic, bladder, and triple-negative breast cancer compared with that in the corresponding normal tissues. Additionally, CD205 was shown frequently expressed in lymphomas, leukemias and multiple myeloma.

Species: Mouse Monoclonal **Cat#:** Z2736 >>>

IHC: Human tonsil stained with ZM360



Click to visit product web page

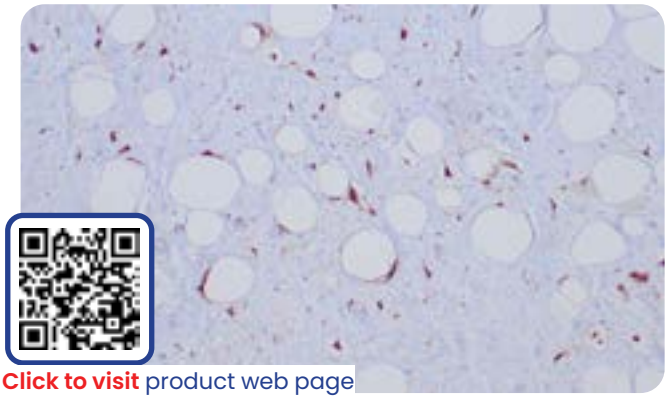
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

CDK4 (clone ZR394)

Recombinant. ZR394 recognizes CDK4 (Cyclin-dependent kinase-4), a protein-serine kinase essential for G1- to S-phase cell cycle transition. Highly expressed in stromal-derived cells and highly differentiated or dedifferentiated liposarcomas, it sustains tumor outgrowth. Combined with MDM2, CDK4 differentiates well-differentiated, dedifferentiated, and myxoid liposarcomas from pleomorphic liposarcoma, spindle lipoma, pleomorphic lipoma, and other high-grade sarcomas. Conversely, it is rarely expressed in other benign liposarcomas and sarcomas.

Species: Rabbit Monoclonal **Cat#:** Z2750 ›››

IHC: Human liposarcoma stained with ZR394



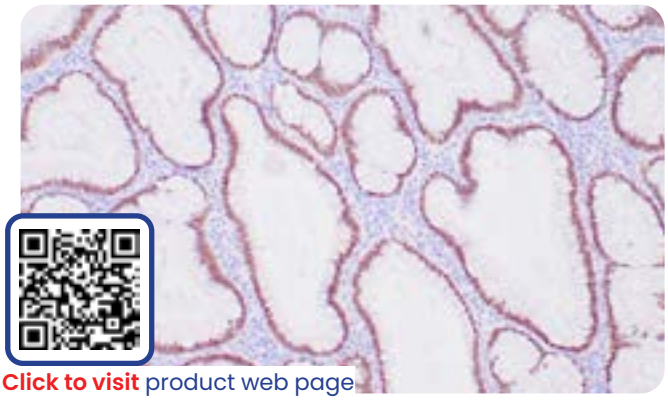
Click to visit product web page

CDX2 (clone ZR215)

Recombinant. ZR215 recognizes CDX2, a homeobox gene-encoded nuclear transcription factor critical for intestinal embryonic development and intestinal epithelial maintenance. Serving as a specific marker for GI adenocarcinomas, it determines metastatic origin and distinguishes primary colorectal adenocarcinoma from primary bladder adenocarcinoma. It also differentiates mucinous bronchioloalveolar adenocarcinoma from metastatic mucinous colorectal adenocarcinoma. However, mucinous ovarian carcinomas also express CDX2, which limits its ability to separate metastatic colorectal adenocarcinoma from mucinous ovarian carcinomas.

Species: Rabbit Monoclonal **Cat#:** Z2494 ›››

IHC: Human colon adenocarcinoma stained with ZR215



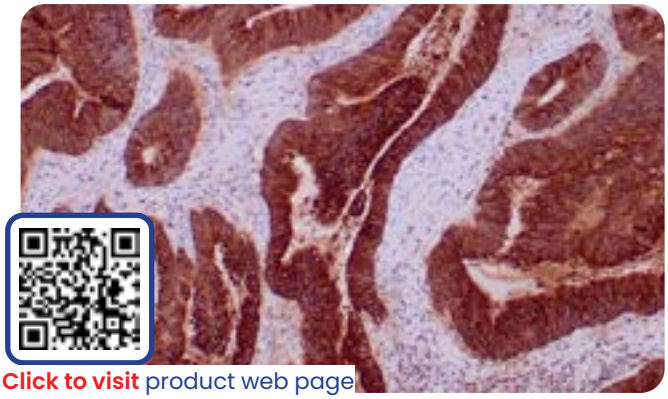
Click to visit product web page

CEACAM5 (clone ZR370)

Recombinant. ZR370 recognizes CEACAM5, a carcinoembryonic antigen-related cell adhesion molecule 5 synthesized during fetal development and re-expressed in intestinal carcinomas. It labels adenocarcinomas of the lung, colon, stomach, esophagus, pancreas, gallbladder, urachus, salivary gland, ovary, and endocervix. It lacks cross-reactivity with nonspecific cross-reacting antigens or human polymorphonuclear leucocytes and is absent in benign glands. It reliably detects early gastric carcinoma foci and distinguishes pulmonary adenocarcinomas from pleural mesotheliomas.

Species: Rabbit Monoclonal **Cat#:** Z2661 ›››

IHC: Human colon carcinoma stained with ZR370



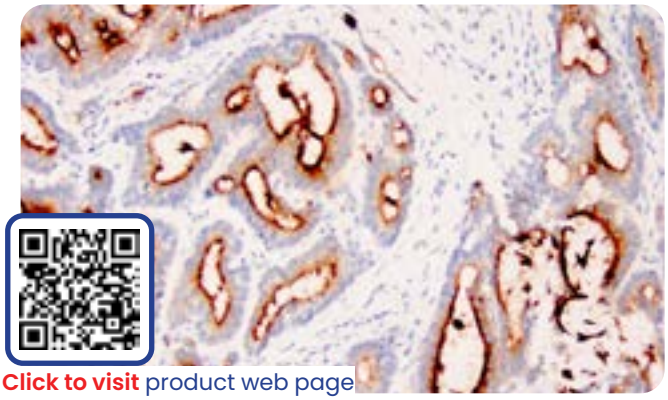
Click to visit product web page

CEA-M (clone CEA31)

CEA31 recognizes CEA, a Carcinoembryonic Antigen. This clone shows high affinity for CEA without detectable reactivity to nonspecific cross-reacting antigen, biliary glycoprotein, or human polymorphonuclear leucocytes. It exhibits no reaction with various normal tissues, benign glands, stroma, or malignant prostatic cells. Crucially, this antibody helps detect early gastric carcinoma foci and successfully distinguishes pulmonary adenocarcinomas, which are sixty to seventy percent positive, from pleural mesotheliomas that present rarely or weakly.

Species: Mouse Monoclonal **Cat#:** Z2100 ›››

IHC: Human colon carcinoma stained with CEA31



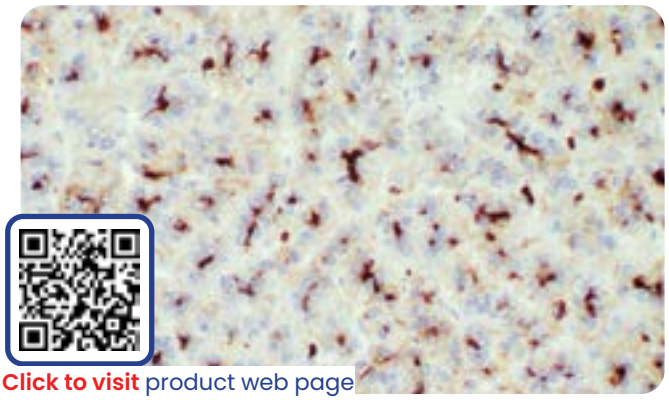
Click to visit product web page

CEA-P *(polyclonal)*

Recognizes CEA-P, a glycosyl phosphatidylinositol cell surface anchored glycoprotein serving as a selectin ligand. It helps distinguish adenocarcinoma from epithelioid malignant mesotheliomas and immunophenotypes metastatic adenocarcinomas to identify origin. Positivity occurs in lung, colon, stomach, esophagus, pancreas, gallbladder, urachus, salivary gland, ovary, and endocervix adenocarcinomas. Absent in benign glands, stroma, or malignant prostatic cells, it stains hepatocellular carcinoma in a useful canalicular pattern.

Species: Rabbit Polyclonal **Cat#:** Z2565 ›››

IHC: Human liver stained with polyclonal anti-CEA-P



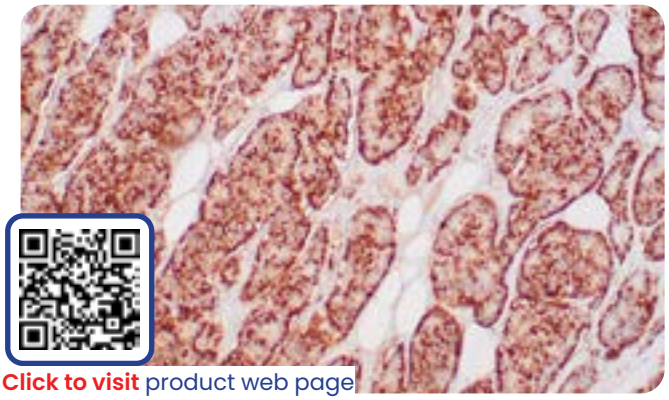
Click to visit product web page

Chromogranin A *(clone ZM12)*

Recombinant. ZM12 recognizes Chromogranin A, present in neuroendocrine cells across the large and small intestine, adrenal medulla, and pancreatic islets. It serves as an excellent marker for carcinoid tumors, pheochromocytomas, paragangliomas, and other neuroendocrine tumors. Co-expression with neuron specific enolase is common in neuroendocrine neoplasms, while strong chromogranin staining without certain keratins suggests paraganglioma. Most pituitary adenomas and prolactinomas readily express Chromogranin A.

Species: Mouse Monoclonal **Cat#:** Z2347 ›››

IHC: Human neuroendocrine tumor stained with ZM12



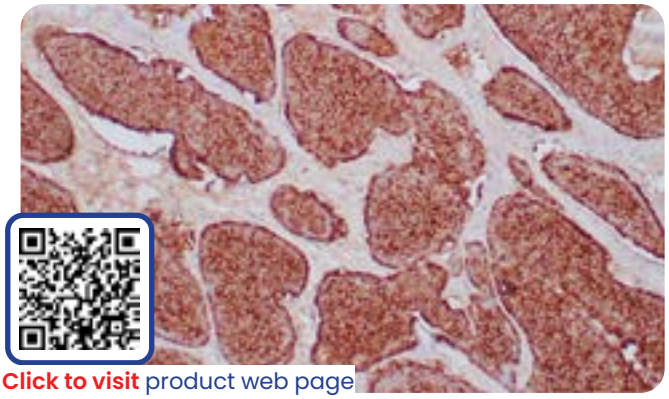
Click to visit product web page

Chromogranin A *(clone ZR427)*

Recombinant. ZR427 recognizes Chromogranin A, found in neuroendocrine cells throughout the large and small intestine, adrenal medulla, and pancreatic islets. It serves as an excellent marker for carcinoid tumors, pheochromocytomas, paragangliomas, and neuroendocrine tumors. It co-expresses with neuron specific enolase in neuroendocrine neoplasms, whereas strong chromogranin staining lacking anti-keratin staining raises the possibility of paraganglioma. Additionally, most pituitary adenomas and prolactinomas express Chromogranin A.

Species: Rabbit Monoclonal **Cat#:** Z2783 ›››

IHC: Human neuroendocrine tumor stained with ZR427



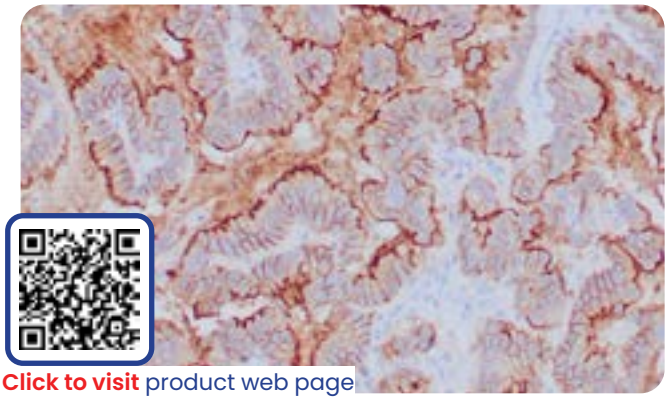
Click to visit product web page

Claudin 18.2 *(clone ZR451)*

Recombinant. ZR451 recognizes Claudin 18.2, a tight junction protein providing prognostic value in gastric and esophagogastric adenocarcinomas. Overexpressed across multiple stages of gastric adenocarcinoma, it contributes directly to cell proliferation, differentiation, and migration. Beyond gastric malignancies, Claudin 18.2 overexpression occurs in breast, colon, liver, head and neck, and bronchial cancers. Functionally, claudins serve as structural and functional components of tight junctions across epithelial and endothelial cells in tight junction-bearing tissues.

Species: Rabbit Monoclonal **Cat#:** Z2807 ›››

IHC: Human gastric adenocarcinoma stained with ZR451



Click to visit product web page

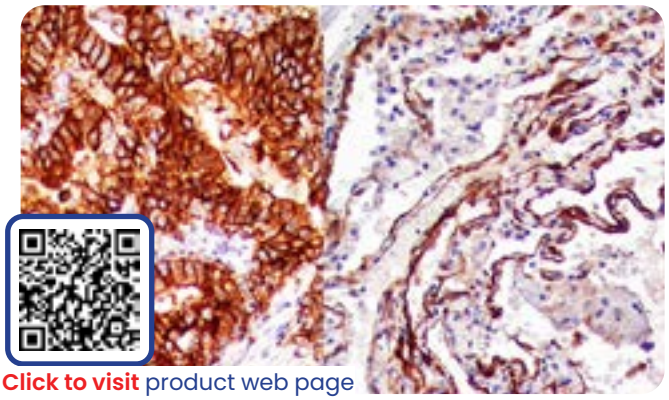
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

NEW! *Claudin 18.2 (clone ZR482)*

Recombinant. ZR482 binds Claudin 18, a tight-junction transmembrane protein maintaining epithelial barrier function with distinct biological isoforms. Claudin 18.1 is expressed in lung epithelium, whereas Claudin 18.2 occurs in gastric epithelium. Raised against a C-terminus peptide shared by both isoforms, this clone stains gastric and lung epithelium alongside gastric, pancreatic, and pulmonary adenocarcinomas. Notably, the final staining pattern of this antibody mimics Roche clone 43-14A.

Species: Rabbit Monoclonal **Cat#:** Z2857 ›››

IHC: Human gastric adenocarcinoma (left) and normal lung (right) stained with ZR482



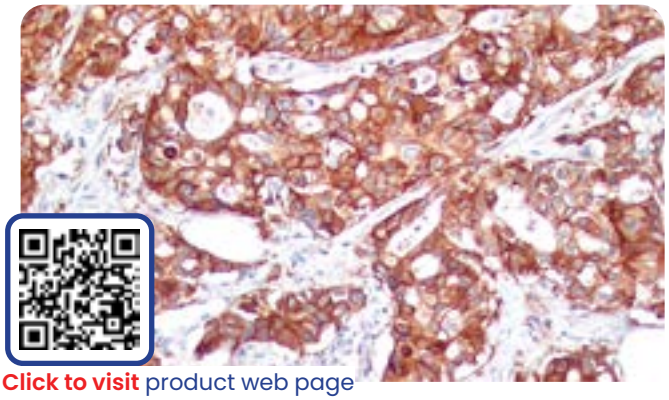
Click to visit product web page

NEW! *c-Met (clone ZR478)*

Recombinant. ZR478 recognizes c-Met, a proto-oncogene tyrosine kinase receptor for hepatocyte growth factor comprised of disulfide-linked forty-five and one hundred forty-five kDa subunits. Receptor activation by ligand binding initiates autophosphorylation to recruit signaling components like Gab1, c-Cbl, and PI3K. Overexpression presents widely in carcinomas with gene amplifications, while activating mutations feature in papillary renal, papillary thyroid, gastric, and hepatocellular carcinomas. This transmembrane receptor protein remains vital for fundamental biological cell functions.

Species: Rabbit Monoclonal **Cat#:** Z2848 ›››

IHC: Human colon adenocarcinoma stained with ZR478



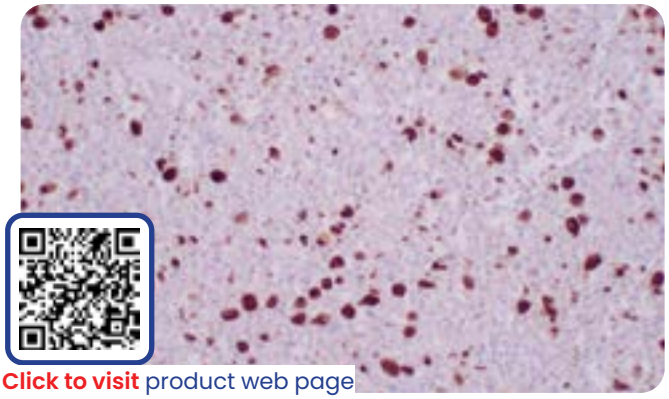
Click to visit product web page

CMV (clone ZR456)

Recombinant. ZR456 recognizes Cytomegalovirus (CMV), an opportunistic pathogen infecting lungs, kidneys, gut, and other organs in immunologically immature or immunosuppressed individuals. It affects transplant recipients, HIV patients, and up to forty percent of AIDS patients. Immunohistochemistry detects CMV infection reliably in formalin-fixed, paraffin-embedded tissues. Furthermore, this antibody detects CMV p65 antigen within peripheral blood leukocytes and bronchoalveolar lavage fluid during the early acute phase of disease.

Species: Rabbit Monoclonal **Cat#:** Z2818 ›››

IHC: CMV infected tissue stained with ZR456



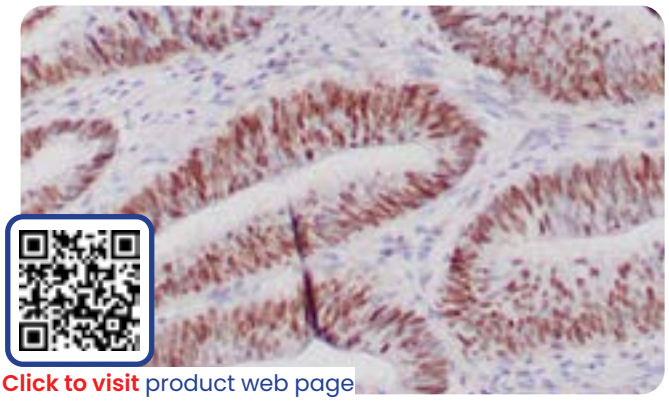
Click to visit product web page

c-myc (clone ZR355)

Recombinant. ZR355 recognizes c-myc, a critical transcription factor involved in cell proliferation, differentiation, growth, and apoptosis. It overexpresses in luminal cells of prostate intraepithelial neoplasia, primary carcinomas, and metastatic disease. Targeting a specific alpha helical region, it avoids cross-reactivity with v-myc. Dysregulation drives B-cell lymphomagenesis as a primary event in Burkitt lymphoma, or secondarily in diffuse large B-cell, plasmablastic, mantle cell, and double-hit lymphomas, though rarely in T-cell malignancies.

Species: Rabbit Monoclonal **Cat#:** Z2734 ›››

IHC: Human colon adenocarcinoma stained with ZR355



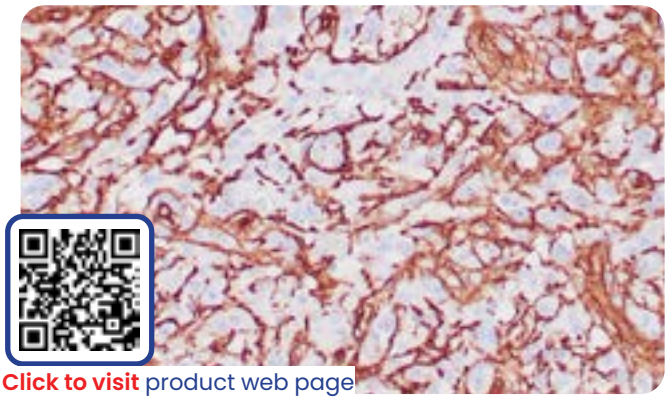
Click to visit product web page

Collagen Type IV *(clone ZR108)*

Recombinant. ZR108 recognizes Collagen Type IV, a basement membrane component regulating cell adhesion, migration, differentiation, and growth. Expressed across kidney, muscle, lymph node, lung, tendon, and spleen tissues, it helps differentiate microinvasive from in situ breast ductal carcinomas. Studies evaluate it in pancreatic adenocarcinoma, chronic pancreatitis, nephrosclerosis, and squamous cell, laryngeal, ovarian, and cervical cancers. Its unique C-terminus structurally links fibers head-to-head, creating pliable sheets that form primary basement membrane structures.

Species: Rabbit Monoclonal **Cat#:** Z2410 ›››

IHC: Human glomus tumor stained with ZR108



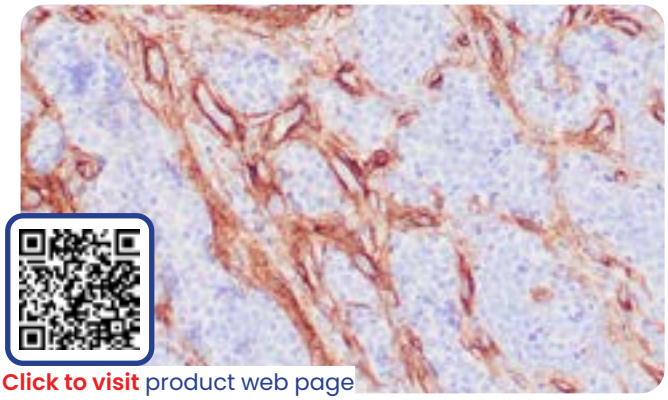
Click to visit product web page

Collagen IV *(clone ZM177)*

Recombinant. ZM177 recognizes Collagen Type IV, a basement membrane component regulating cell adhesion, migration, differentiation, and growth. Expressed across kidney, muscle, lymph node, lung, tendon, and spleen tissues, it helps differentiate microinvasive from in situ breast ductal carcinomas. Studies evaluate it in pancreatic adenocarcinoma, chronic pancreatitis, nephrosclerosis, and squamous cell, laryngeal, ovarian, and cervical cancers. Its unique C-terminus structurally links fibers head-to-head, creating pliable sheets that form primary basement membrane structures.

Species: Mouse Monoclonal **Cat#:** Z2478 ›››

IHC: Human glomus tumor stained with ZM177



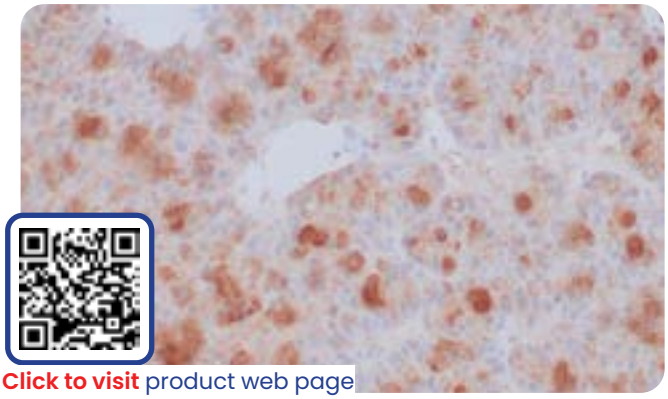
Click to visit product web page

CPA1 *(clone ZR450)*

Recombinant. ZR450 identifies CPA1, a 419 amino acid-secreted monomeric protein highly expressed in pancreatic tissue. As a zinc-dependent pancreatic exopeptidase, it cleaves C-terminal amino acids to digest protein. Beyond catalytic degradation, it likely blocks enzyme activation pathways via zymogen inhibition. Immunohistochemistry serves as a highly sensitive, specific method to identify pancreatic Acinar Cell Carcinoma. Furthermore, abnormal CPA1 levels correlate with pancreatic cancer, implying a potential role in tumor progression or suppression.

Species: Rabbit Monoclonal **Cat#:** Z2806 ›››

IHC: Human pancreatic acinar cell carcinoma stained with ZR450



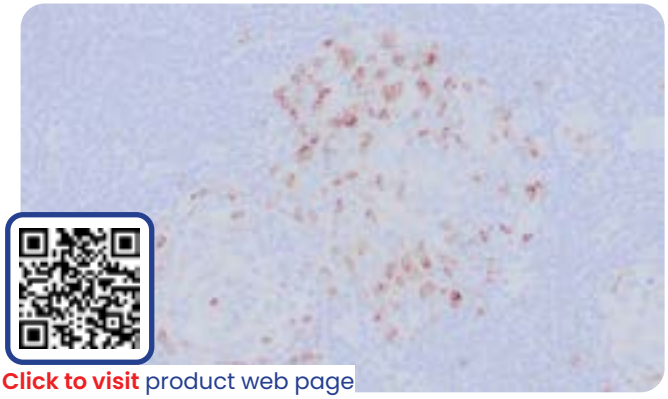
Click to visit product web page

CTLA-4 *(clone ZR452)*

Recombinant. ZR452 binds Cytotoxic T lymphocyte-associated antigen-4 (CTLA-4), a CD28 superfamily member regulating T-cell immune responses. Expressed on CD4+ and CD8+ T-cells, it maintains T-cell homeostasis and labels tumor microenvironment lymphocytes in formalin-fixed tissues. It acts as an immune checkpoint inhibitor on T-regulatory cells, competing with CD28 for CD80 and CD86 ligands to downregulate CD4+ helper cells. Ultimately, CTLA-4 acts as a physiological brake on the immune system.

Species: Rabbit Monoclonal **Cat#:** Z2808 ›››

IHC: Human tonsil stained with ZR452



Click to visit product web page

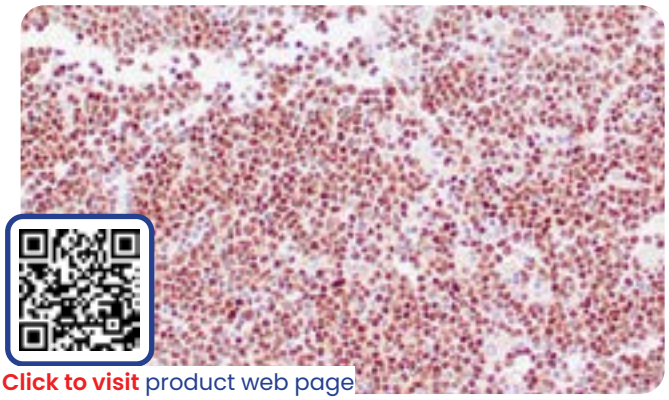
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

Cyclin D1 *(clone ZM178)*

Recombinant. ZM178 recognizes Cyclin D1, a 36kDa putative proto-oncogene cell cycle regulator overexpressed across various human neoplasms. Approximately sixty percent of mantle cell lymphomas harbor a t(11;14)(q13;q32) translocation driving Cyclin D1 overexpression. This antibody separates positive mantle cell lymphomas from negative chronic lymphocytic leukemia/small lymphocytic lymphoma and follicular lymphomas. Additionally, hairy cell leukemia and plasma cell myeloma show occasional weak expression of this specific marker.

Species: Mouse Monoclonal **Cat#:** Z2480 ›››

IHC: Human mantle cell lymphoma stained with ZM178



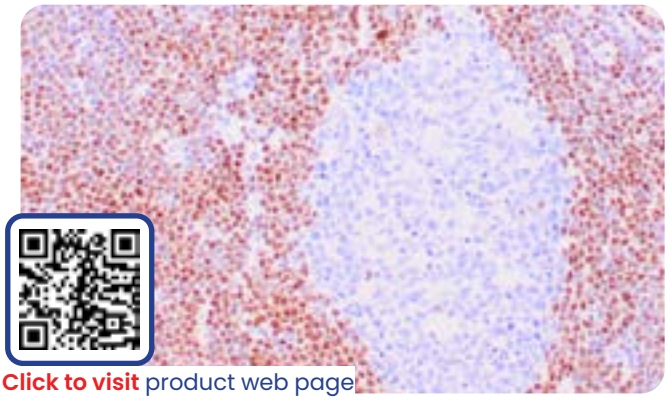
Click to visit product web page

Cyclin D1 *(clone ZR197)*

Recombinant. ZR197 recognizes Cyclin D1, known as PRAD-1 or bcl-1, a key cell cycle regulator that phosphorylates the Rb protein alongside CDK4 and CDK6. Overexpressed in mantle cell lymphomas and other human neoplasms, it acts as a putative proto-oncogene. This 36kDa protein serves as an essential tool to differentiate positive mantle cell lymphomas from negative chronic lymphocytic leukemia/small lymphocytic lymphoma and follicular lymphomas. Occasionally, hairy cell leukemia and plasma cell myeloma display weak expression.

Species: Rabbit Monoclonal **Cat#:** Z2515 ›››

IHC: Human mantle cell lymphoma stained with ZR197



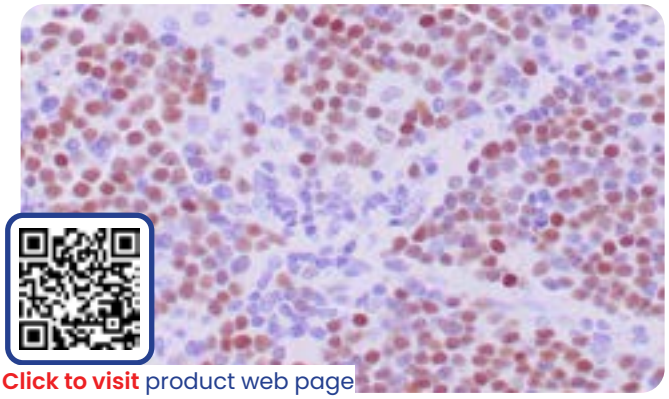
Click to visit product web page

Cyclin-E *(clone ZM121)*

Recombinant. ZM121 recognizes Cyclin E, a highly conserved cyclin family member regulating CDK kinases with distinct expression and degradation patterns. It forms a complex acting as a regulatory subunit of CDK2, necessary for cell cycle G1/S transition. Cyclin E accumulates at the G1-S phase boundary and degrades during S phase progression. Notably, observed Cyclin E overexpression across many tumors drives chromosome instability, which directly contributes to oncogenic cellular tumorigenesis.

Species: Mouse Monoclonal **Cat#:** Z2431 ›››

IHC: Human colon carcinoma stained with ZM121



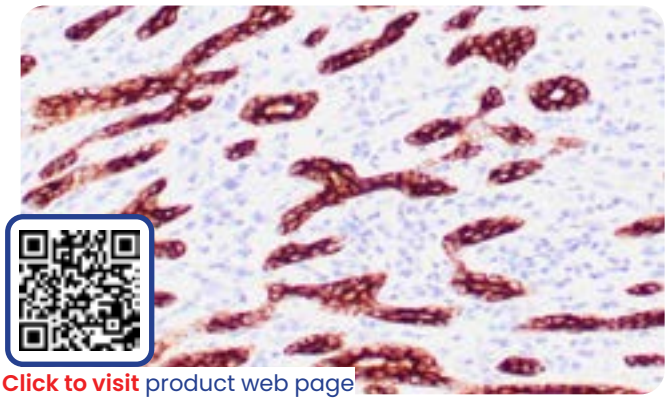
Click to visit product web page

Cytokeratin *(clone CAM5.2)*

CAM5.2 recognizes Cytokeratin, water-insoluble intracytoplasmic structural proteins dominating epithelial and hair-forming cells. This clone reacts primarily with human keratin proteins corresponding to Moll's peptides seven and eight, weighing 48 and 52 kDa. It stains secretory epithelia of normal human tissues and most epithelial-derived tissues including liver, renal tubular epithelium, and hepatocellular or renal cell carcinomas. However, it avoids stratified squamous epithelium and might fail to react with some squamous cell carcinomas.

Species: Mouse Monoclonal **Cat#:** Z2018 ›››

IHC: Human breast stained with CAM5.2



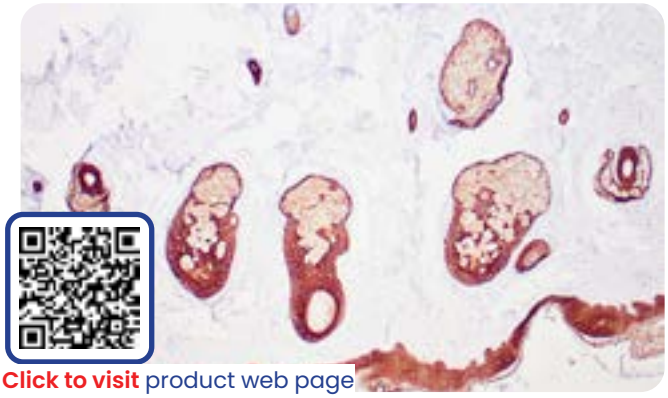
Click to visit product web page

Cytokeratin, HMW *(clone 34βE12)*

34βE12 recognizes cytokeratins 1, 5, 10, and 14 within the Moll catalog, weighing 68kDa, 58kDa, 56.5kDa, and 50kDa. It serves as a useful marker for identifying squamous carcinomas from adenocarcinomas and differentiating benign from malignant prostatic lesions. It labels squamous, ductal, and complex epithelia, reacting with benign prostate small-acinar lesions while avoiding hepatocytes, pancreatic acinar cells, proximal renal tubules, or endometrial glands. It reacts with squamous and ductal neoplasms.

Species: Mouse Monoclonal **Cat#:** Z2019 ›››

IHC: Human skin with carcinoma stained with 34βE12



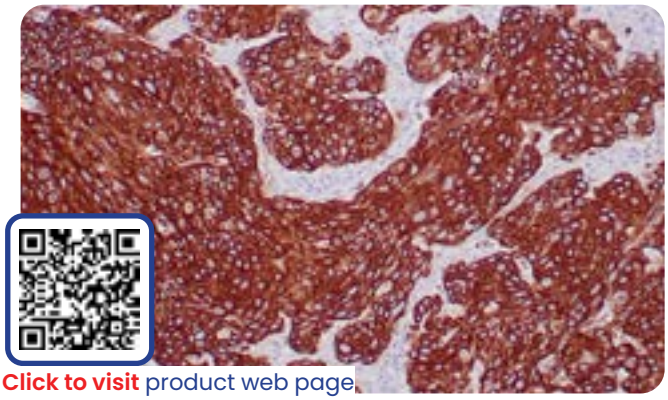
Click to visit product web page

Cytokeratin, Pan *(clone AE1/AE3)*

AE1/AE3 recognizes cytokeratins, resolving into acidic and basic subfamilies found in pairs across different cell types and differentiation statuses. The cocktail combines AE1, targeting acidic keratins weighing 56.5, 50, 48, and 40kDa, with AE3, targeting basic keratins weighing 65-67, 64, 59, 58, 56, and 52kDa. This broad-spectrum pan-keratin antibody reacts with various stratified squamous, complex, and simple epithelia, successfully differentiating epithelial tumors from non-epithelial tumors in cancer research.

Species: Mouse Monoclonal **Cat#:** Z2061 ›››

IHC: Human infiltrating breast carcinoma stained with AE1/AE3



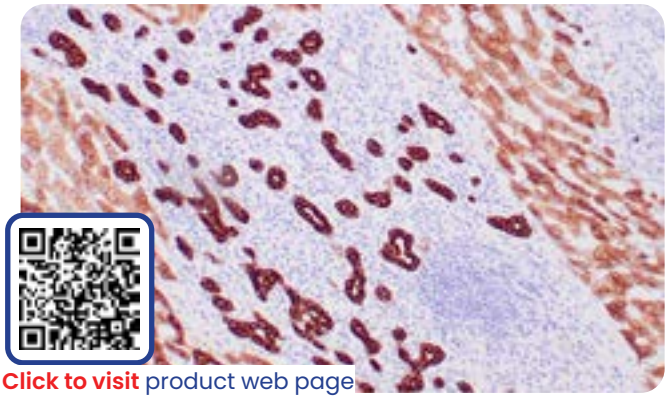
Click to visit product web page

Cytokeratin, Pan *(clone OSCAR)*

OSCAR demonstrates a broad spectrum of cytokeratin reactivity, labeling normal epithelial tissues including bile ducts, hepatocytes, bladder, bronchus, stomach, and pancreas. It reacts positively on the basal layer of squamous epithelium but avoids superficial layers. In malignancies, it stains most carcinomas including breast, transitional cell, renal cell, lung, endometrial, hepatocellular, and thyroid cancers. Conversely, it is negative in normal brain, lymphocytes, muscle, nerves, melanomas, sarcomas, lymphomas, primitive neuroectodermal tumors, and gastrointestinal stromal tumors.

Species: Mouse Monoclonal **Cat#:** Z2539 ›››

IHC: Human liver stained with OSCAR



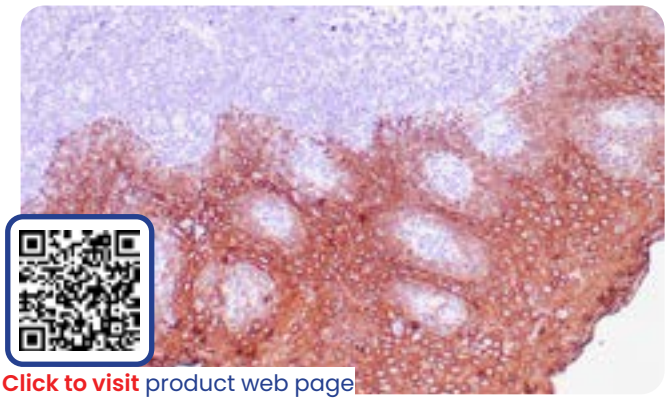
Click to visit product web page

Cytokeratin 5 *(clone ZM186)*

ZM186 recognizes Cytokeratin 5 (KRT5), a 58kDa Type II cytokeratin specifically expressed in the basal layer of the epidermis alongside KRT14. Mutations in KRT5 result in the autosomal dominant disorder epidermolysis bullosa. Cytokeratins comprise a diverse group of intermediate filament proteins expressed in pairs across keratinized and non-keratinized epithelial tissues. They play a critical role in differentiation and structural integrity, serving as useful tissue differentiation markers directly applicable to characterizing malignant tumors.

Species: Mouse Monoclonal **Cat#:** Z2505 ›››

IHC: Human tonsil stained with ZM186



Click to visit product web page

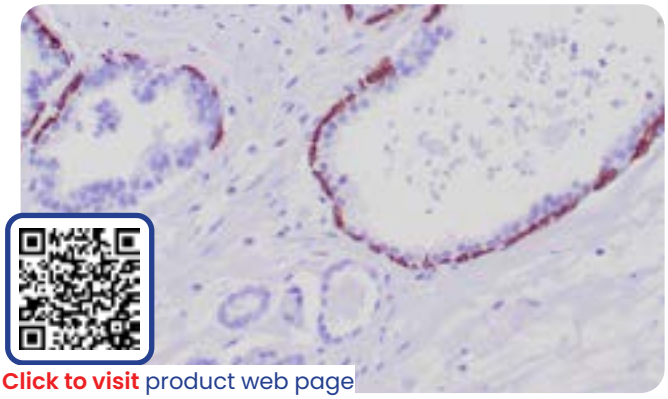
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

Cytokeratin 5 *(clone ZR280)*

Recombinant. ZR280 recognizes Cytokeratin 5 (CK5), a 58kDa Type II cytokeratin specifically expressed in the basal layer of the epidermis with partner KRT14. Preferred over K903 for prostate carcinoma detection, it identifies squamous origin in poorly differentiated carcinomas when combined with p63+. It highlights breast myoepithelial cells and prostate basal cells, distinguishing breast usual ductal hyperplasia and papillary lesions from DCIS. Mutations in Cytokeratin 5 cause the autosomal dominant disorder epidermolysis bullosa.

Species: Rabbit Monoclonal **Cat#:** Z2595 ›››

IHC: Human prostate stained with ZR280



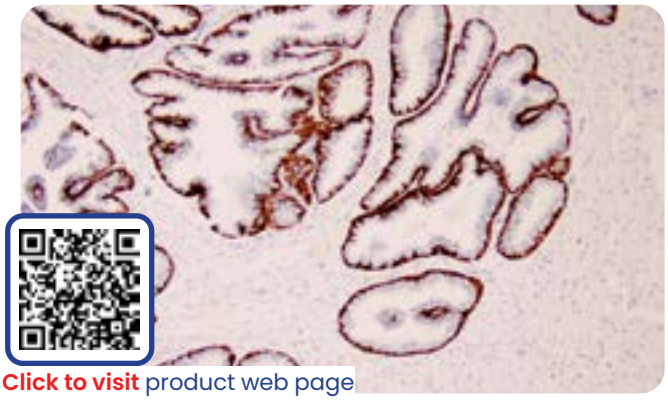
Click to visit product web page

Cytokeratin 5/6 *(clone D5/16B4)*

D5/16B4 recognizes cytokeratins, which resolve into acidic and basic subfamilies found together in pairs. The specific composition of these keratin pairs varies significantly depending on the epithelial cell type, stage of cellular differentiation, immediate microenvironment, and overall disease state. Because of these distinct and predictable pairing patterns across different tissues, many research studies have demonstrated the usefulness of cytokeratins as highly reliable structural markers in cancer research and tumor identification.

Species: Mouse Monoclonal **Cat#:** Z2133 ›››

IHC: Human prostate tissue stained with D5/16B4



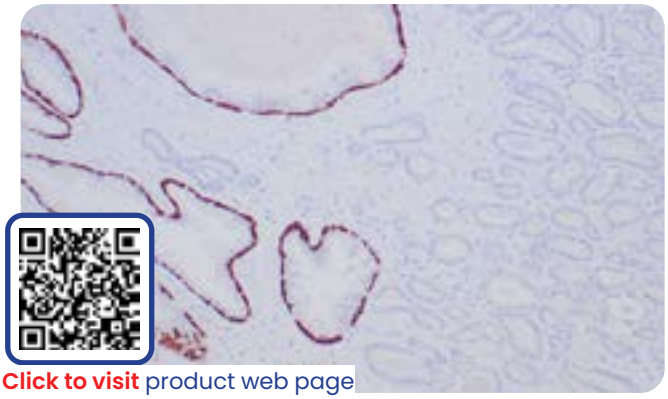
Click to visit product web page

Cytokeratin 5/6 *(clone ZR412)*

Recombinant. ZR412 recognizes Cytokeratins 5 and 6, closely related basic proteins sharing similar tissue distribution across non-keratinizing stratified squamous epithelia like the tongue mucosa. They occur in basal cells of the trachea, epidermis, hair follicles, sebaceous glands, prostate, urothelium, vagina, and endocervical mucosa. They express strongly in basal cell epitheliomas, squamous cell carcinomas of the skin, tongue, epiglottis, and rectal-anal region, providing a useful diagnostic aid for classifying epithelioid mesotheliomas.

Species: Rabbit Monoclonal **Cat#:** Z2768 ›››

IHC: Human prostate carcinoma stained with ZR412



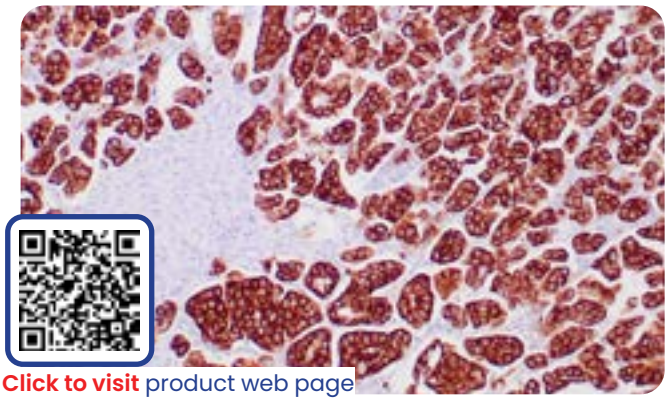
Click to visit product web page

Cytokeratin 7 *(clone OV-TL-12/30)*

OV-TL-12/30 recognizes Cytokeratin 7, a basic cytokeratin found in most glandular and transitional epithelia, but notably absent from stratified squamous epithelia. This antigen is normally expressed in the epithelial cells of the ovary, lung, and breast. However, it is not found in the colon, prostate, or gastrointestinal tract. Consequently, this specific antibody is highly useful in diagnostic pathology for distinguishing positive ovarian carcinomas from negative colon carcinomas.

Species: Mouse Monoclonal **Cat#:** Z2067 ›››

IHC: Human ovarian carcinoma stained with OV-TL-12/30



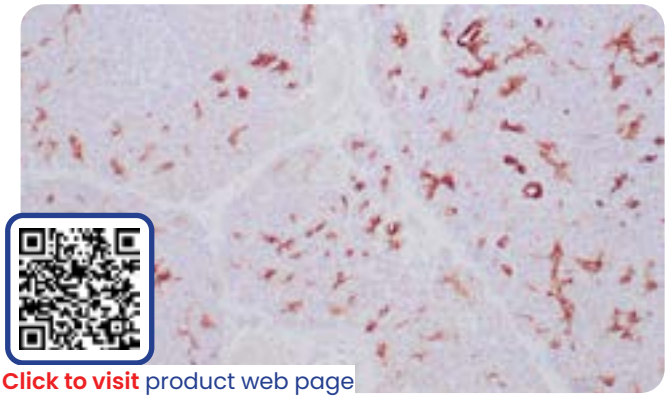
Click to visit product web page

Cytokeratin-7 (CK7) *(clone ZR428)*

Recombinant. ZR428 recognizes Cytokeratin-7 (CK7), a 55kDa basic intermediate filament protein. It is highly specific to cytokeratin-7 and demonstrates no cross-reactivity with other intermediate filament proteins. Present in most glandular and transitional epithelia, it avoids stratified squamous epithelia. It expresses in epithelial cells of the ovary, lung, and breast, but remains absent in the colon, prostate, and gastrointestinal tract. This makes it highly useful for distinguishing positive ovarian carcinomas from negative colon carcinomas.

Species: Rabbit Monoclonal **Cat#:** Z2784 ›››

IHC: Human ovarian carcinoma stained with ZR428



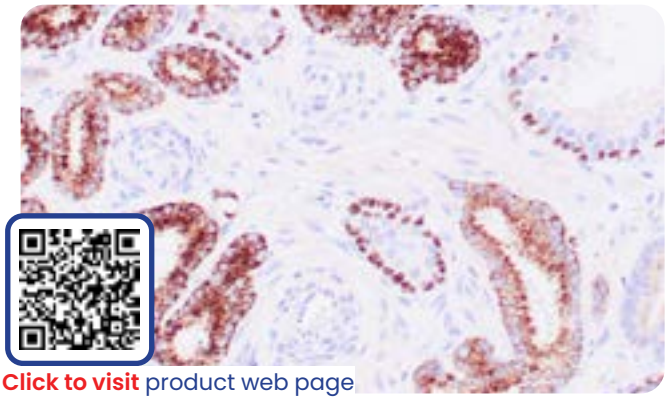
Click to visit product web page

Cytokeratin 8 *(clone ZM123)*

ZM123 recognizes Keratin 8, which belongs to the type B basic subfamily of high molecular weight keratins and exists in combination with keratin 18. Primarily found in non-squamous epithelia, it is present in the vast majority of adenocarcinomas and ductal carcinomas. Conversely, it is completely absent in squamous cell carcinomas. Notably, hepatocellular carcinomas are explicitly defined in diagnostic panels by the use of antibodies that recognize only cytokeratin polypeptides 8 and 18.

Species: Mouse Monoclonal **Cat#:** Z2433 ›››

IHC: Human basal cell carcinoma stained with ZM123



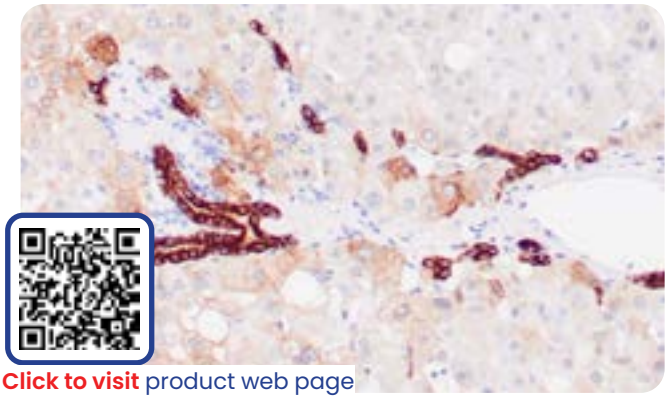
Click to visit product web page

Cytokeratin 8/18 *(clone B22.1 & B23.1)*

B22.1 & B23.1 recognize Cytokeratin 8/18, staining all simple epithelia including glandular epithelium across thyroid, breast, gastrointestinal, respiratory, and urogenital tracts. Cytokeratin 8 belongs to the type II basic subfamily of high molecular weight cytokeratins, pairing with cytokeratin 18. All adenocarcinomas and most squamous carcinomas test positive, whereas keratinizing squamous carcinomas are usually negative. This antibody is also highly useful for demonstrating Paget cells, as normal epidermis contains very little keratin 18.

Species: Mouse Monoclonal **Cat#:** Z2252 ›››

IHC: Human liver stained with B22.1 & B23.1



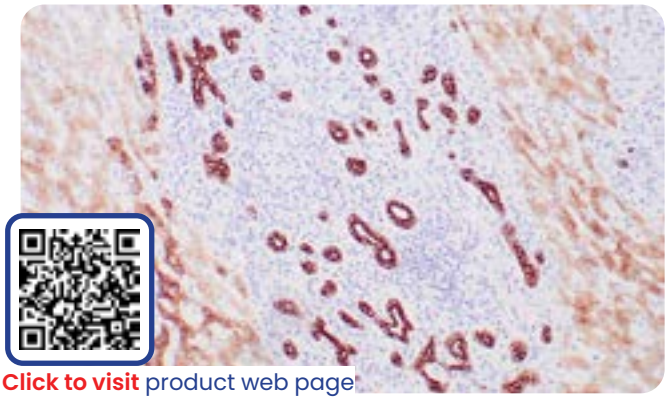
Click to visit product web page

Cytokeratin 8/18 *(clone ZM125)*

Recombinant. ZM125 recognizes Cytokeratin 8 and 18, which stain all simple epithelia including glandular epithelium across the thyroid, female breast, gastrointestinal, respiratory, and urogenital tracts. Cytokeratin 8 belongs to the type II basic subfamily of high molecular weight cytokeratins, pairing with cytokeratin 18. Practically all adenocarcinomas and most squamous carcinomas test positive, while keratinizing squamous carcinomas are usually negative. This specific antibody is exceptionally useful for demonstrating the presence of Paget cells.

Species: Mouse Monoclonal **Cat#:** Z2435 ›››

IHC: Human liver stained with ZM125



Click to visit product web page

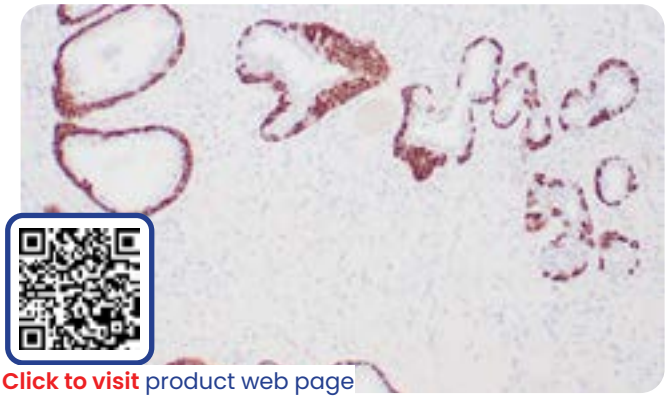
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

Cytokeratin 14 *(clone LL002)*

LL002 recognizes Cytokeratin 14 (CK14), a type I acidic subfamily low molecular weight keratin pairing with keratin 5. Found in basal cells of squamous epithelia, glandular epithelia, myoepithelium, and mesothelial cells, it distinguishes squamous cell carcinomas from poorly differentiated epithelial tumors. It serves as a basal marker for breast carcinoma subtypes and highlights cells surrounding in-situ neoplasms in intraductal salivary duct carcinomas. It also differentiates benign prostate from prostate carcinoma and identifies renal oncocytic tumors.

Species: Mouse Monoclonal **Cat#:** Z2042 ›››

IHC: Human breast stained with LL002



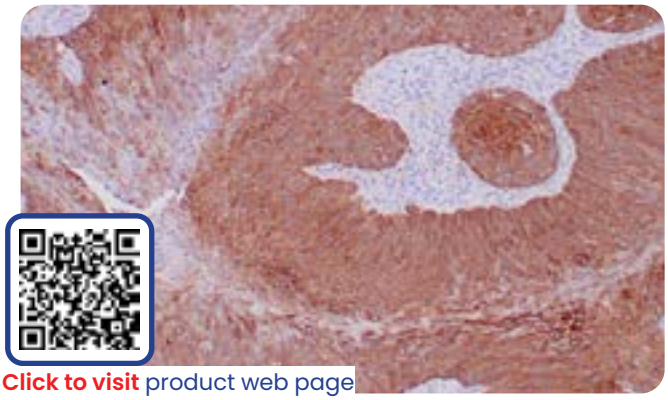
Click to visit product web page

Cytokeratin 14 *(clone ZM372)*

Recombinant. ZM372 recognizes Cytokeratin 14 (CK14), a type I acidic low molecular weight keratin that pairs with keratin 5. Located in basal cells of squamous epithelia, glandular epithelia, myoepithelium, and mesothelial cells, it separates squamous cell carcinomas from poorly differentiated epithelial tumors. It distinguishes basal breast carcinoma subtypes, differentiates benign prostate from prostate carcinoma, separates renal oncocytic tumors from mimics, and highlights basal cells to identify intraductal salivary duct carcinomas and metaplastic breast carcinomas.

Species: Mouse Monoclonal **Cat#:** Z2663 ›››

IHC: Human squamous cell carcinoma stained with ZM372



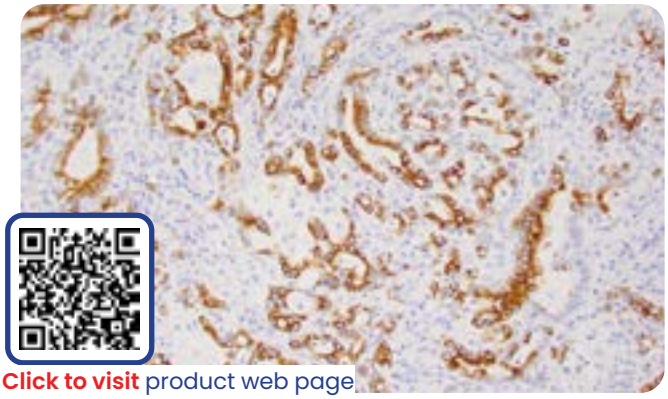
Click to visit product web page

Cytokeratin 17 *(clone E3)*

E3 recognizes Cytokeratin 17 (CK17), demonstrating a peculiar localization in human epithelial appendages, including hair follicles, which undergo adult growth cycles. Induced alongside CK6 and CK16 following acute human skin injury, CK17 features prominently in basal cell carcinomas (BCC) along with frequent CK19 expression. This predominant CK17 staining, paired with minimal CK6/CK16 and CK1/CK10 expression, characterizes BCC, suggesting these tumors differentiate toward undifferentiated follicular epithelia, specifically hair bulge cells.

Species: Mouse Monoclonal **Cat#:** Z2254 ›››

IHC: Human pancreatic ductal carcinoma stained with E3



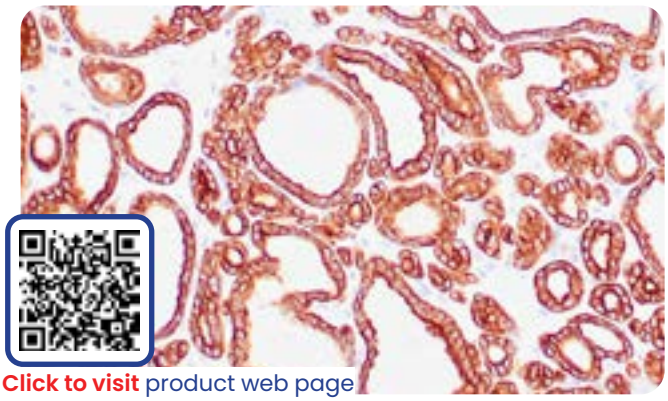
Click to visit product web page

Cytokeratin 18 *(clone DC-10)*

DC-10 recognizes Cytokeratin 18, a type A acidic low molecular weight keratin and serum breast cancer tumor marker. It reacts widely with simple epithelia across the gastrointestinal tract, lung, breast, pancreas, ovary, and thyroid, but avoids stratified squamous epithelia. It exists in combination with Cytokeratin 8. Tissues from the gastrointestinal, respiratory, and urogenital tracts test positive, as do endocrine tissues, exocrine tissues, and mesothelial cells, whereas gastrointestinal tissues lack Cytokeratin 14 expression.

Species: Mouse Monoclonal **Cat#:** Z2044 ›››

IHC: Human thyroid gland stained with DC-10



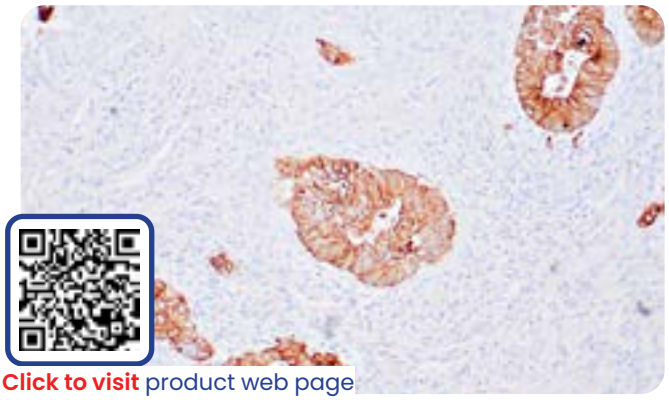
Click to visit product web page

Cytokeratin 18 *(clone ZM205)*

Recombinant. ZM205 recognizes Cytokeratin 18, a type A acidic low molecular weight keratin serving as a serum tumor marker for breast cancer. It reacts with simple epithelia across the gastrointestinal tract, lung, breast, pancreas, ovary, and thyroid while avoiding stratified squamous epithelia. Pairing with Cytokeratin 8, it stains gastrointestinal, respiratory, and urogenital tracts, alongside endocrine tissues, exocrine tissues, and mesothelial cells. Notably, these gastrointestinal tract tissues test positive for Cytokeratin 18 but lack Cytokeratin 14.

Species: Mouse Monoclonal **Cat#:** Z2541 >>>

IHC: Human colon carcinoma stained with ZM205



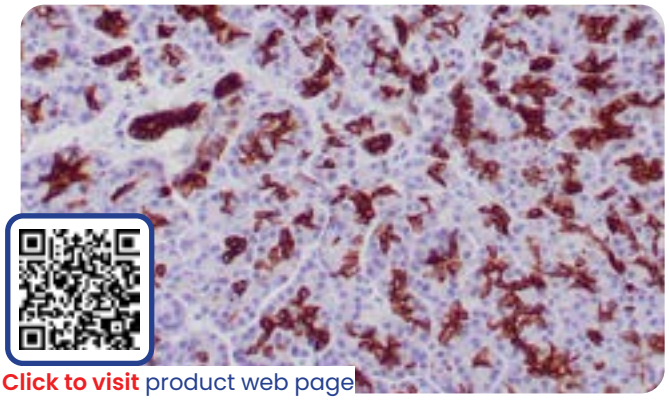
Click to visit product web page

Cytokeratin 19 *(clone BA17)*

BA17 recognizes Cytokeratin 19, a type I acidic subfamily intermediate filament expressed across various human tissues except liver hepatocytes. Because it is absent in normal hepatocytes, this antibody is highly useful for identifying liver metastasis. It reacts with MCF-7 cells known to contain CK19, but shows no reaction with CK19-lacking cells such as A431 and Hela. Combined with HBME1, CK19 is exceptionally valuable for differentiating thyroid carcinoma from benign thyroid follicles in diagnostic surgical pathology panels.

Species: Mouse Monoclonal **Cat#:** Z2134 >>>

IHC: Human pancreatic ducts stained with BA17



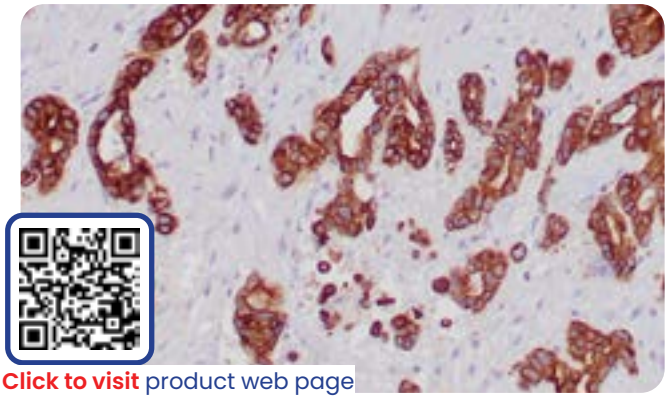
Click to visit product web page

Cytokeratin 19 *(clone ZR143)*

Recombinant. ZR143 recognizes Cytokeratin 19 (CK19), specifically targeting the rod domain of this 40kDa polypeptide. It is expressed by sweat glands, mammary gland ductal and secretory cells, bile ducts, gastrointestinal tract, bladder urothelium, oral epithelia, esophagus, and ectocervical epithelium. It identifies epithelial malignancies including colon, stomach, pancreas, biliary tract, liver, and breast adenocarcinomas. It labels papillary thyroid carcinomas, fifty to sixty percent of follicular carcinomas, and tumor cells in lymph nodes, bone marrow, and peripheral blood.

Species: Rabbit Monoclonal **Cat#:** Z2688 >>>

IHC: Human pancreatic ductal carcinoma stained with ZR143



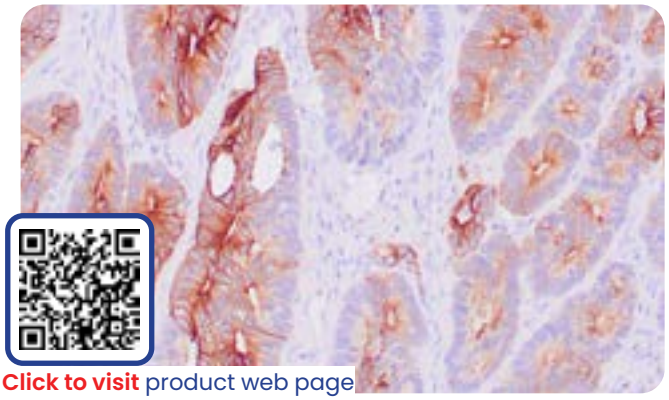
Click to visit product web page

Cytokeratin 20 *(clone Ks20.8)*

Ks20.8 recognizes Cytokeratin 20 (CK20), a type-1 keratin primarily expressed in gastric and intestinal epithelium, urothelium, and Merkel-cells. It occurs in adenocarcinomas of the colon, stomach, pancreas, and bile system, alongside mucinous ovarian tumors, transitional-cell carcinomas, and Merkel-cell carcinomas. Notably, squamous cell carcinomas, breast, lung, and endometrium adenocarcinomas, non-mucinous ovarian tumors, and small cell carcinomas completely lack CK20. This stark distribution makes it a crucial tool for precise diagnostic lineage determination.

Species: Mouse Monoclonal **Cat#:** Z2065 >>>

IHC: Human colon carcinoma stained with Ks20.8



Click to visit product web page

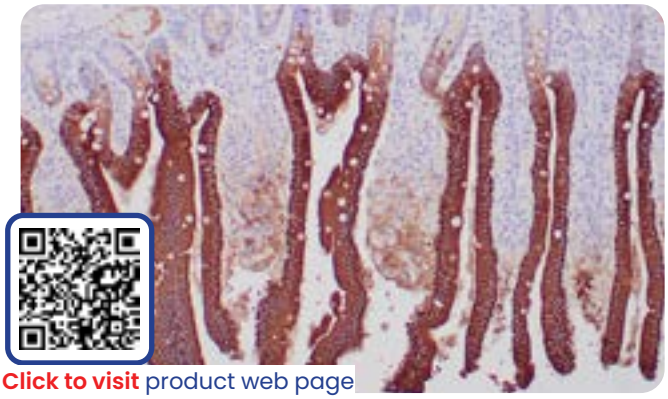
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

Cytokeratin 20 (CK20) *(clone ZM42)*

ZM42 recognizes Cytokeratin 20 (CK20), a 46kDa intermediate filament protein abundantly expressed in goblet cells and enterocytes of the gastrointestinal tract. Serving as a useful marker of pancreatic and colorectal cancer, CK20 is expressed under normal, hyperplastic, and neoplastic conditions. It has been consistently detected in adenocarcinomas of the colon, stomach, and biliary tract. Conversely, breast carcinomas are generally non-reactive, making this clone valuable within complex diagnostic panels to establish specific tumor origin.

Species: Mouse Monoclonal **Cat#:** Z2349 ›››

IHC: Human colon carcinoma stained with ZM42



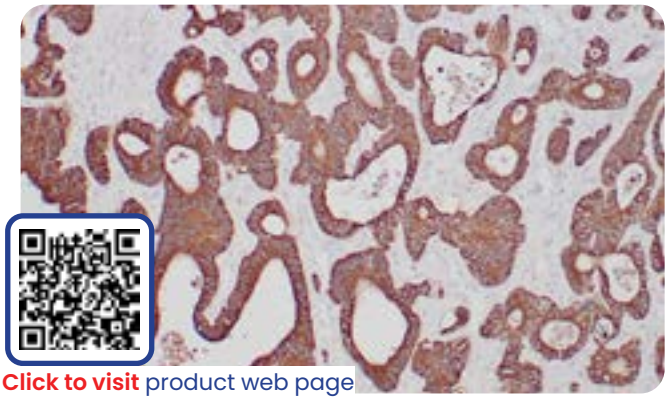
Click to visit product web page

Cytokeratin 20 (CK20) *(clone ZR429)*

Recombinant. ZR429 recognizes Cytokeratin 20 (CK20), a 46kDa intermediate filament protein abundantly expressed in goblet cells and enterocytes of the gastrointestinal tract. It serves as a useful marker for pancreatic and colorectal cancer, expressing under normal, hyperplastic, and neoplastic conditions. CK20 has been detected in adenocarcinomas of the colon, stomach, and biliary tract. Conversely, breast carcinomas are generally non-reactive, providing an essential diagnostic rule-out tool for precise epithelial lineage determination in surgical pathology panels.

Species: Rabbit Monoclonal **Cat#:** Z2785 ›››

IHC: Human colon carcinoma stained with ZR429



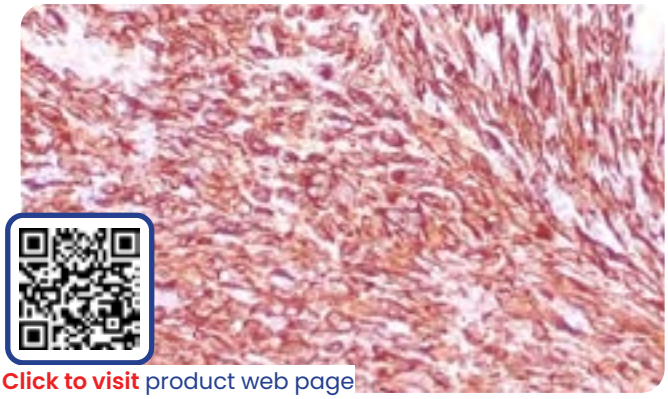
Click to visit product web page

Desmin *(clone ZR240)*

Recombinant. ZR240 recognizes Desmin, a 469 amino acid intermediate filament protein found near the Z line in sarcomeres and expressed more frequently in adult differentiated state tissues. It acts as a standard marker for smooth, skeletal, and cardiac muscles. This antibody reacts reliably with leiomyomas, leiomyosarcomas, rhabdomyomas, rhabdomyosarcomas, and perivascular cells of skin glomus tumors. It helps identify individual cell types within tissues, identifying the specific origins of metastatic tumors arising from mesenchyme.

Species: Rabbit Monoclonal **Cat#:** Z2536 ›››

IHC: Human leiomyosarcoma stained with ZR240



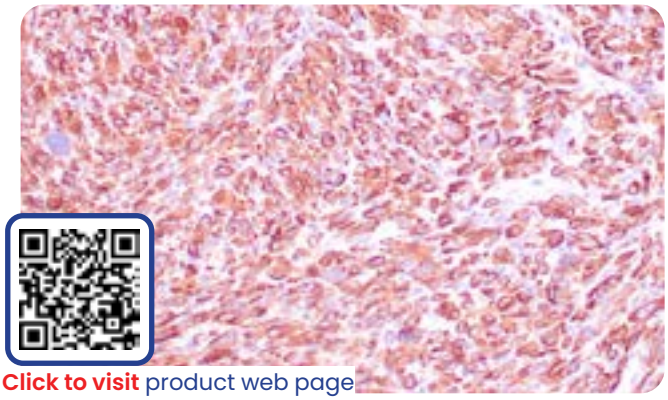
Click to visit product web page

Desmin *(clone ZM34)*

ZM34 recognizes Desmin, an intermediate filament protein found in smooth and striated muscles. It reacts with striated skeletal and cardiac muscles, where staining confines to the Z-bands to give a characteristic striated appearance, alongside smooth muscle cells. This anti-desmin antibody serves as a useful tool for identifying tumors of myogenic origin. Specifically, it reacts strongly with smooth muscle leiomyosarcomas as well as striated muscle rhabdomyosarcomas to confirm precise tumor lineage.

Species: Mouse Monoclonal **Cat#:** Z2339 ›››

IHC: Human uterus stained with ZM34



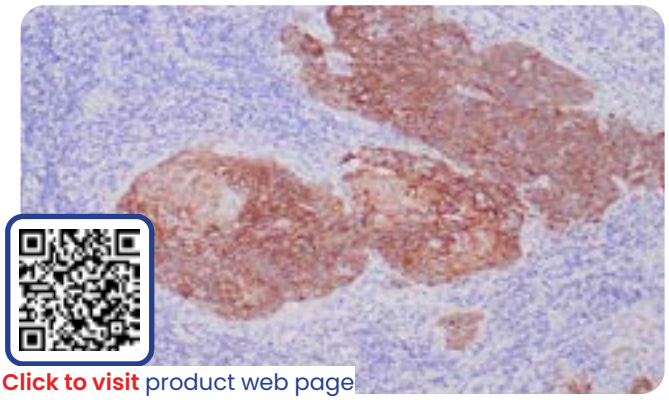
Click to visit product web page

Desmoglein-3 (clone ZR128)

Recombinant. ZR128 recognizes Desmoglein-3 (DSG3), a 130kDa calcium-binding transmembrane glycoprotein component of desmosomes in vertebrate epithelial cells. It demonstrates no cross-reactivity with other Desmoglein family members. This antibody shows very high eighty percent sensitivity and one hundred percent specificity in recognizing squamous cell carcinoma (SqCC). It functions as an important marker for lung SqCC and serves as a useful ancillary tool to separate SqCC from other lung cancer subtypes, indicating poor prognosis.

Species: Rabbit Monoclonal **Cat#:** Z2438 >>>

IHC: Human squamous cell carcinoma stained with ZR128



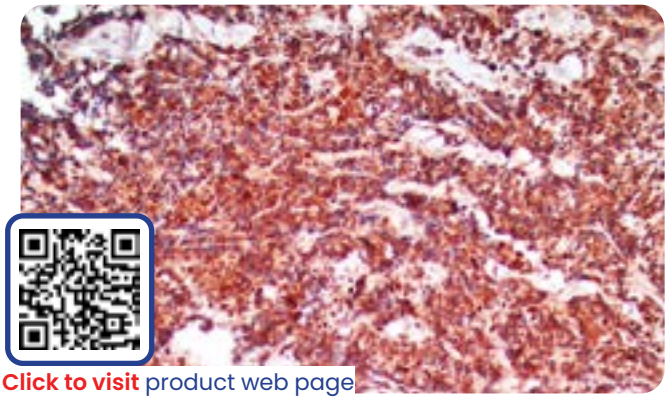
Click to visit product web page

NEW! *DLL3 (clone ZR479)*

Recombinant. ZR479 recognizes DLL3 (Delta-like ligand 3), a single-pass transmembrane inhibitory Notch ligand with a DSL domain, six EGF-like repeats, and a short intracellular tail. Aberrant gene upregulation drives high DLL3 expression in small cell lung cancer (SCLC) and neuroendocrine neoplasms. Over eighty percent of SCLCs and high-grade neuroendocrine tumors overexpress DLL3. Trafficked to the cell surface, it acts as a potent, highly tumor-selective target in SCLC and other neuroendocrine cancers.

Species: Rabbit Monoclonal **Cat#:** Z2849 >>>

IHC: Human lung small cell carcinoma stained with ZR479



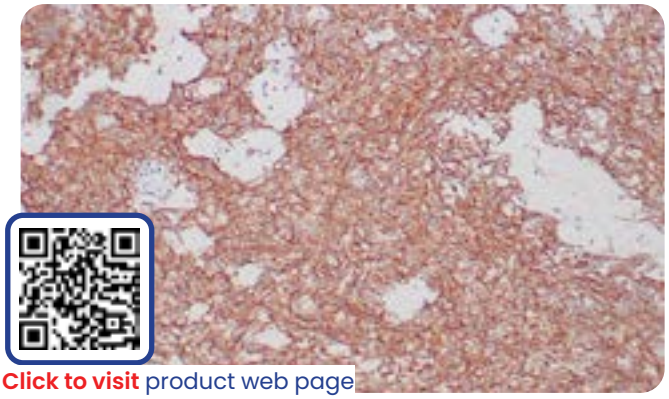
Click to visit product web page

DOG-1 (clone ZR146)

Recombinant. ZR146 recognizes DOG-1 (Discovered On GIST 1), a protein elevated in ninety-seven point eight percent of gastrointestinal stromal tumors (GISTs), including c-kit negative cases. Rarely expressed in other soft tissue tumors, DOG-1 immunoreactivity aids in identifying GISTs, including Platelet-Derived Growth Factor Receptor Alpha mutants lacking c-kit antigen. Primarily used for GIST diagnosis, DOG-1 codes for anoctamin 1 and expresses in normal luminal surfaces of gastric glands, pancreatic acini, and breast myoepithelial cells.

Species: Rabbit Monoclonal **Cat#:** Z2690 >>>

IHC: GIST stained with ZR146



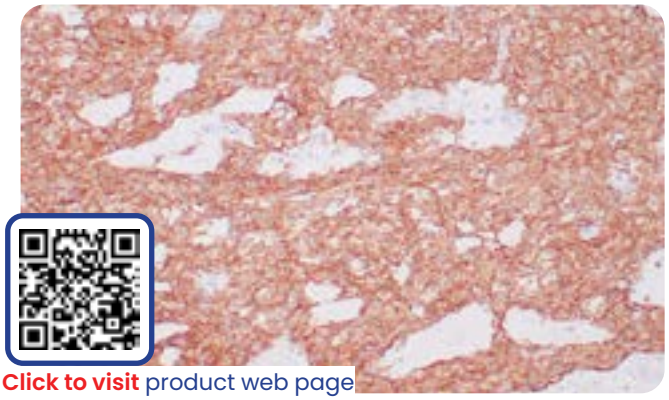
Click to visit product web page

DOG-1 (clone DOG1.1)

DOG1.1 recognizes DOG-1 (Discovered On GIST 1), a protein elevated in ninety-seven point eight percent of gastrointestinal stromal tumors (GISTs), including c-kit negative cases. Rarely expressed in other soft tissue tumors, DOG-1 immunoreactivity aids in identifying GISTs, including Platelet-Derived Growth Factor Receptor Alpha mutants lacking c-kit antigen. Primarily used for GIST diagnosis, DOG-1 codes for anoctamin 1 and expresses in normal luminal surfaces of gastric glands, pancreatic acini, and breast myoepithelial cells.

Species: Mouse Monoclonal **Cat#:** Z2013 >>>

IHC: GIST stained with DOG1.1



Click to visit product web page

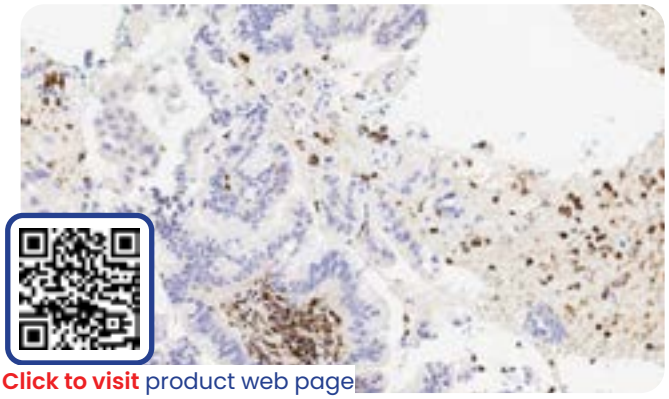
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

DPC4/SMAD4 *(clone B-8)*

B-8 recognizes DPC4/SMAD4, a serine/threonine kinase tumor suppressor mediating ligand-activated membrane receptor signaling to nuclear targets. Upon ligand binding, TGF-beta family receptors phosphorylate SMAD proteins, which translocate to the nucleus to activate transcription. Inactivated in over half of pancreatic tumors and present in eighty percent of pancreatic adenocarcinomas, it serves as an essential diagnostic marker. Conversely, lack of expression remains rare in endometrial, colorectal, ovarian, lung, breast, adenocarcinomas, and malignant melanoma.

Species: Mouse Monoclonal **Cat#:** Z2240 ›››

IHC: Human pancreatic ductal adenocarcinoma stained with B-8



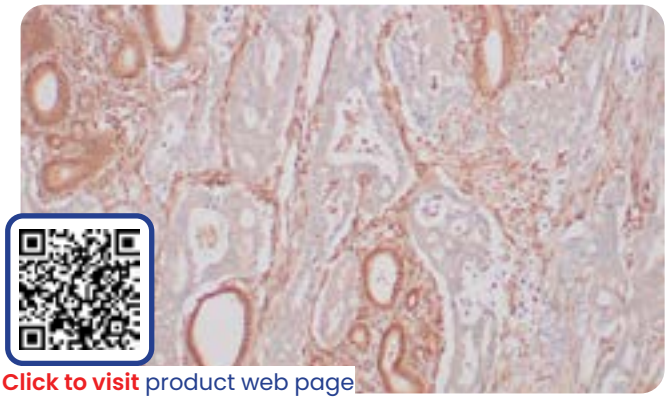
Click to visit product web page

DPC4/SMAD4 *(clone ZR392)*

ZR392 recognizes DPC4/SMAD4, a serine/threonine kinase tumor suppressor mediating ligand-activated membrane receptor signaling to nuclear targets. Upon ligand binding, TGF-beta family receptors phosphorylate SMAD proteins, which translocate to the nucleus to activate transcription. Inactivated in over half of pancreatic tumors and present in eighty percent of pancreatic adenocarcinomas, it serves as an essential diagnostic marker. Conversely, lack of expression remains rare in endometrial, colorectal, ovarian, lung, breast, adenocarcinomas, and malignant melanoma.

Species: Rabbit Monoclonal **Cat#:** Z2748 ›››

IHC: Human pancreatic ductal carcinoma stained with ZR392



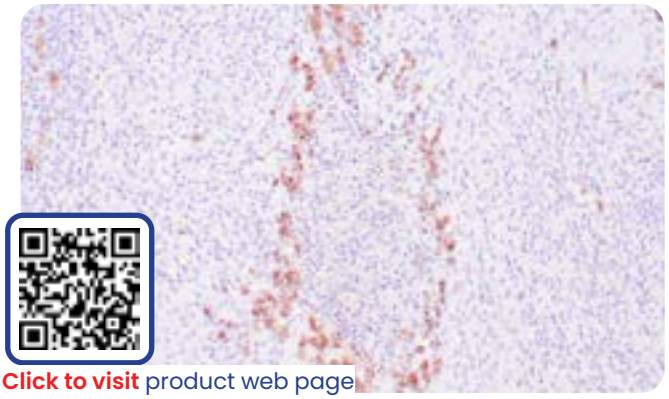
Click to visit product web page

EBV-LMP *(clone CS1-4)*

CS1-4 recognizes EBV-LMP, the Epstein-Barr virus-encoded latent membrane protein 2A (LMP2A). This antibody reacts strongly with EBV-positive lymphoblastoid cell lines and EBV-infected B-cell immunoblasts in infectious mononucleosis. It also reacts with twenty-five to fifty percent of EBV-associated undifferentiated nasopharyngeal carcinomas. Furthermore, it highlights Reed-Sternberg cells in approximately ninety percent of EBV-associated Hodgkin's lymphoma cases by recognizing distinct epitopes on the hydrophilic carboxyl region of LMP exposed to the cytosol.

Species: Mouse Monoclonal **Cat#:** Z2094 ›››

IHC: Human Hodgkin's lymphoma stained with CS1-4



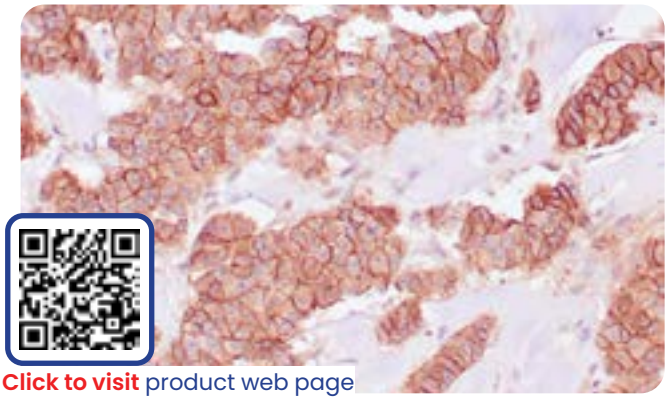
Click to visit product web page

E-Cadherin *(clone ZM63)*

Recombinant. ZM63 recognizes E-Cadherin, a transmembrane, calcium-dependent cell adhesion protein maintaining epithelial cell structure and polarity. Reduced expression breaks cell contacts, enabling cellular migration. In normal tissues, immunostaining localizes to the epithelial cell membrane. In tumors, it stains positively in lung, gastrointestinal, and ovary adenocarcinomas, alongside select thyroid carcinomas. Combined with p120 catenin, it helps distinguish breast ductal carcinoma from lobular carcinoma, where reduced E-Cadherin correlates with poor prognosis across several carcinomas.

Species: Mouse Monoclonal **Cat#:** Z2373 ›››

IHC: Human infiltrating breast carcinoma stained with ZM63



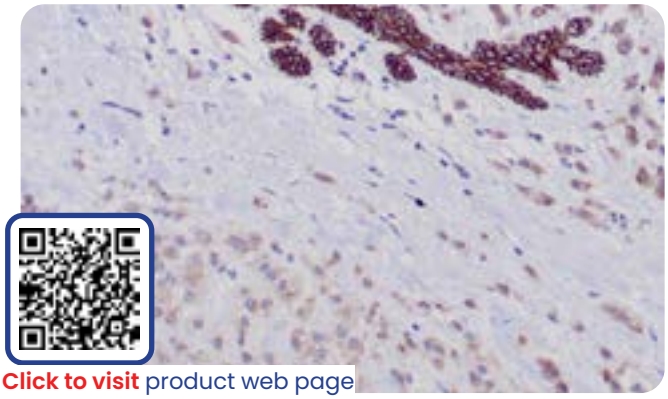
Click to visit product web page

E-Cadherin (clone ZR375)

Recombinant. ZR375 recognizes E-Cadherin, a transmembrane, calcium-dependent cell adhesion protein maintaining epithelial cell structure and polarity. Reduced expression breaks cell contacts, enabling cellular migration. In normal tissues, immunostaining localizes to the epithelial cell membrane. In tumors, it stains positively in lung, gastrointestinal, and ovary adenocarcinomas, alongside select thyroid carcinomas. Combined with p120 catenin, it helps distinguish breast ductal carcinoma from lobular carcinoma, where reduced E-Cadherin correlates with poor prognosis across several carcinomas.

Species: Rabbit Monoclonal **Cat#:** Z2666 ›››

IHC: Human breast lobular tissue stained with ZR375



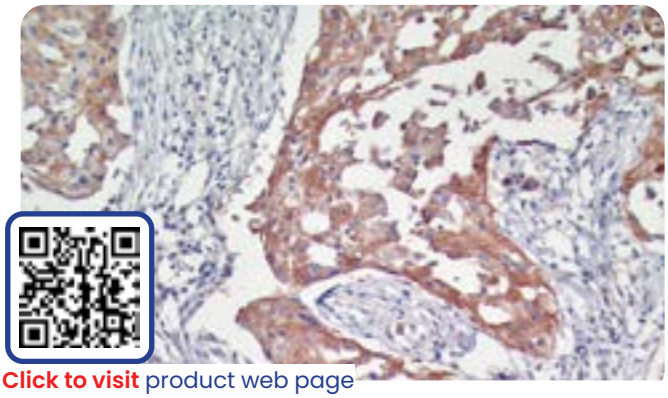
Click to visit product web page

NEW! *EGFR (L858R) (clone ZR483)*

Recombinant. ZR483 recognizes mutated EGFR protein on FFPE immunohistochemistry. Epidermal Growth Factor Receptor is a tyrosine kinase critical in epithelial growth signaling, driven by oncogenic mutations especially in lung adenocarcinoma and glioblastoma. This clone specifically targets mutated proteins rather than wild-type EGFR. Approximately forty to fifty percent of Asian and ten to fifteen percent of Western lung adenocarcinomas feature EGFR mutations, primarily dominant exon 19 deletions or the classic L858R mutation.

Species: Rabbit Monoclonal **Cat#:** Z2858 ›››

IHC: Human lung adenocarcinoma with exon 21 L858R mutation stained with ZR483



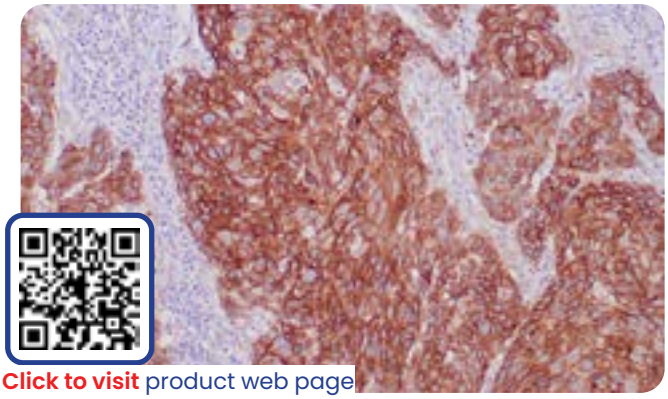
Click to visit product web page

EGFR (clone ZR16)

Recombinant. ZR16 recognizes EGFR, an immunohistochemistry marker strongly expressed on tumor cell membranes, with high levels found in squamous cell carcinomas and adenocarcinomas. This 170kDa type I receptor tyrosine kinase binds EGF, TGF-a, HB-EGF, amphiregulin, betacellulin, and epiregulin. Increased levels link to malignant transformation of squamous cells in lung, head, neck, skin, cervix, and esophagus carcinomas. It is overexpressed in breast, brain, bladder, lung, gastric, and endometrium tumors.

Species: Rabbit Monoclonal **Cat#:** Z2743 ›››

IHC: Human lung squamous cell carcinoma stained with ZR16



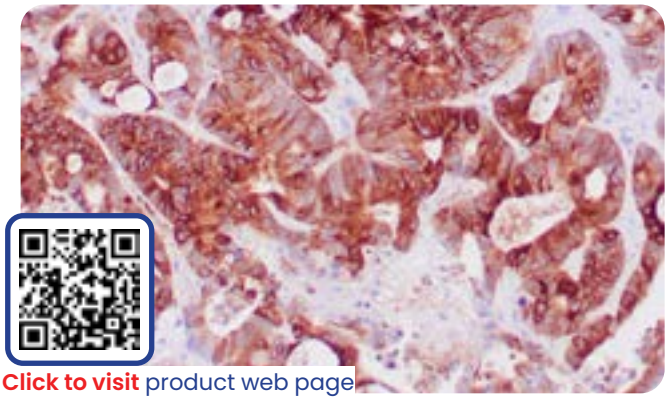
Click to visit product web page

EMA (clone E29)

E29 recognizes EMA, a glycoprotein protecting epithelial cells that acts as a carcinoma marker, identifying glycoforms ranging from 265-400kDa. It stains normal and neoplastic cells including mammary epithelium, sweat glands, and colorectal carcinoma, but remains negative in hepatocellular carcinoma, adrenal carcinoma, and embryonal carcinomas. It is frequently positive in meningioma, distinguishing it from schwannomas. It also serves as a pan-epithelial marker for detecting early metastatic foci of carcinoma in bone marrow or liver.

Species: Mouse Monoclonal **Cat#:** Z2048 ›››

IHC: Human breast cancer stained with E29



Click to visit product web page

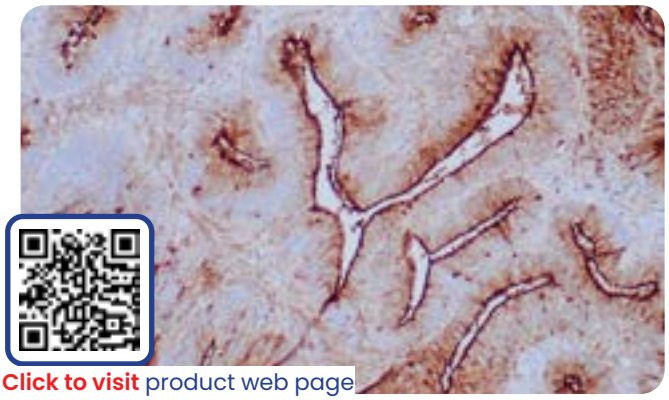
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

EMA *(clone ZR133)*

Recombinant. ZR133 recognizes EMA, a glycoprotein protecting epithelial cells that acts as a carcinoma marker, identifying glycoforms ranging from 265-400kDa. It stains normal and neoplastic cells including mammary epithelium, sweat glands, and colorectal carcinoma, but remains negative in hepatocellular carcinoma, adrenal carcinoma, and embryonal carcinomas. It is frequently positive in meningioma, distinguishing it from schwannomas. It also serves as a pan-epithelial marker for detecting early metastatic foci of carcinoma in bone marrow or liver.

Species: Rabbit Monoclonal **Cat#:** Z2684 ›››

IHC: Human colon cancer stained with ZR133



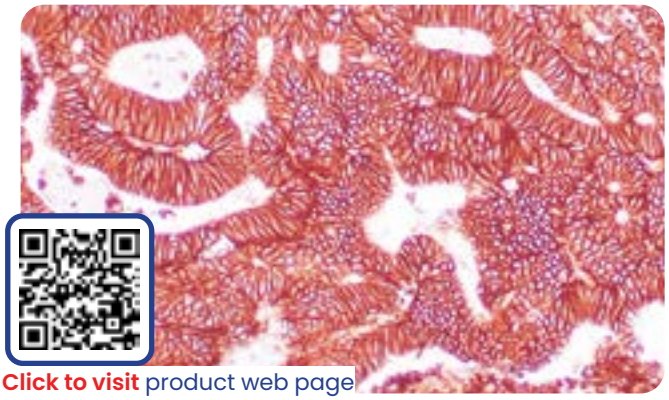
Click to visit product web page

EP-CAM *(clone ZM131)*

Recombinant. ZM131 recognizes EP-CAM (Epithelial Cellular Adhesion Molecule), expressed on the basolateral cell surface in most simple epithelia and a vast majority of carcinomas. EP-CAM is a 40-43kDa transmembrane epithelial glycoprotein, also identified as epithelial specific antigen (ESA). In diagnostic panels, this antibody functions as a valuable tool to distinguish adenocarcinoma from pleural mesothelioma and hepatocellular carcinoma. Furthermore, it is exceptionally useful in distinguishing serous carcinomas of the ovary from mesothelioma.

Species: Mouse Monoclonal **Cat#:** Z2441 ›››

IHC: Human colon adenocarcinoma stained with ZM131



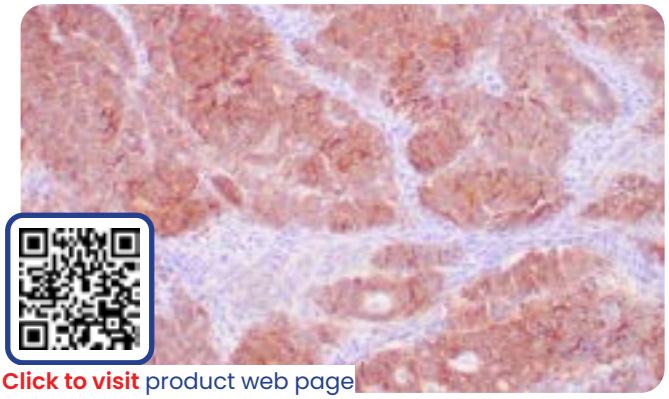
Click to visit product web page

EP-CAM/ESA *(clone MOC-31)*

MOC-31 recognizes EP-CAM/ESA (Epithelial Cellular Adhesion Molecule), a 40-43kDa transmembrane epithelial glycoprotein present on most glandular epithelium and derived tumors. Expressed basolaterally in most simple epithelia and carcinomas, it remains absent in adult squamous epithelium, hepatocytes, and gastric epithelial cells. This antibody is used to distinguish adenocarcinoma from pleural mesothelioma and hepatocellular carcinoma. Additionally, it is highly useful in distinguishing serous carcinomas of the ovary from mesothelioma.

Species: Mouse Monoclonal **Cat#:** Z2162 ›››

IHC: Human colon adenocarcinoma stained with MOC-31



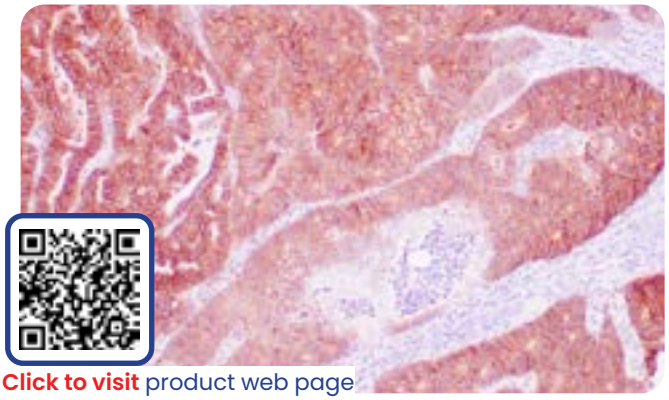
Click to visit product web page

EP-CAM/ESA *(clone ZR307)*

Recombinant. ZR307 recognizes EP-CAM/ESA, targeting an epitope in the first EGF-like repeat domain containing amino acids 27-59. This 40-43kDa transmembrane epithelial glycoprotein is expressed basolaterally in most simple epithelia and carcinomas, excluding adult squamous epithelium, hepatocytes, and gastric epithelial cells. It is used to distinguish adenocarcinoma from pleural mesothelioma and hepatocellular carcinoma. This antibody is also highly useful in distinguishing serous carcinomas of the ovary from mesothelioma.

Species: Rabbit Monoclonal **Cat#:** Z2557 ›››

IHC: Human colon adenocarcinoma stained with ZR307



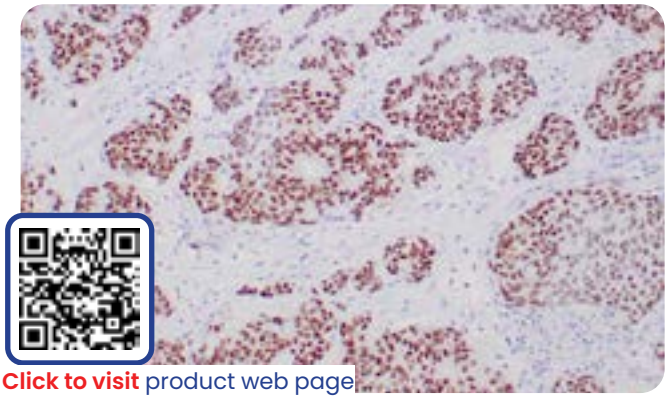
Click to visit product web page

ER *(clone ZR147)*

Recombinant. ZR147 recognizes ER (Estrogen Receptor), a 553 amino acid steroid receptor superfamily member with DNA-binding, hormone-binding, and transcription-activating domains. It mediates female sex steroid functions across reproductive, mammary, skeletal, and cardiovascular systems. Expressed in normal breast nuclei, endometrial tissues, and breast carcinomas, positive status predicts favorable overall survival. Presence of ER in breast tumors is particularly useful as an aid to diagnosis, molecular subtype classification of adenocarcinomas, and prognostic stratification of breast carcinoma.

Species: Rabbit Monoclonal **Cat#:** Z2691 ›››

IHC: Human breast carcinoma stained with ZR147



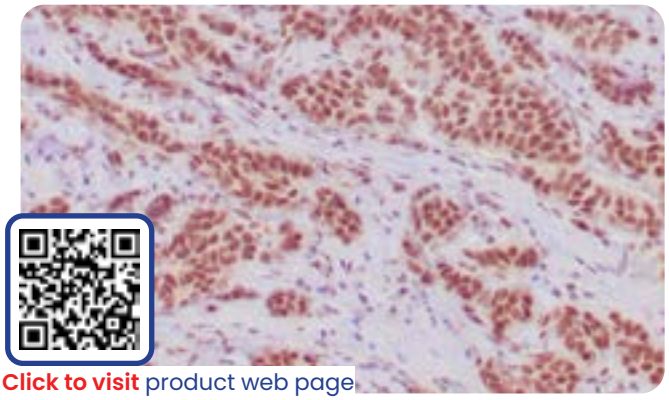
Click to visit product web page

ER *(clone ZM319)*

Recombinant. ZM319 recognizes ER (Estrogen Receptor), a 553 amino acid steroid receptor superfamily member with DNA-binding, hormone-binding, and transcription-activating domains. It mediates female sex steroid functions across reproductive, mammary, skeletal, and cardiovascular systems. Expressed in normal breast nuclei, endometrial tissues, and breast carcinomas, positive status predicts favorable overall survival. Presence of ER in breast tumors is particularly useful as an aid to diagnosis, molecular subtype classification of adenocarcinomas, and prognostic stratification of breast carcinoma..

Species: Mouse Monoclonal **Cat#:** Z2625 ›››

IHC: Human breast adenocarcinoma stained with ZM319



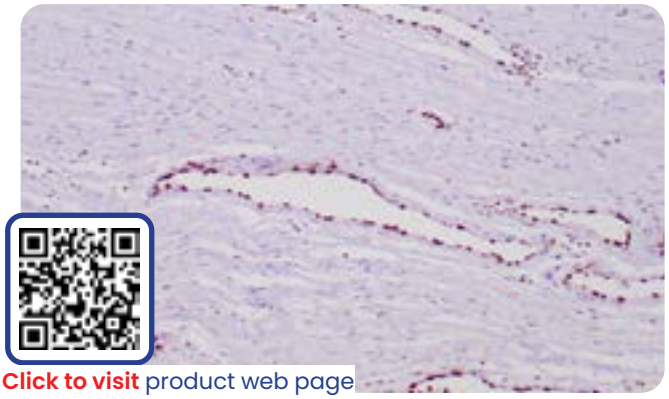
Click to visit product web page

ERG *(clone ZR331)*

Recombinant. ZR331 recognizes ERG, an ETS-related proto-oncogene encoding a nuclear protein involved in hematopoietic and endothelial development. It is expressed constitutively in blood and lymphatic endothelial cells, bone marrow stem cells, and all endothelial neoplasms. Overexpressed secondary to gene rearrangement in prostate adenocarcinoma, it also occurs in epithelioid sarcoma, meningioma, Ewing sarcoma, and various tumors. For endothelial differentiation, ERG is highly sensitive and specific, offering easier interpretation due to its distinct nuclear reaction.

Species: Rabbit Monoclonal **Cat#:** Z2637 ›››

IHC: Stained with ZR331



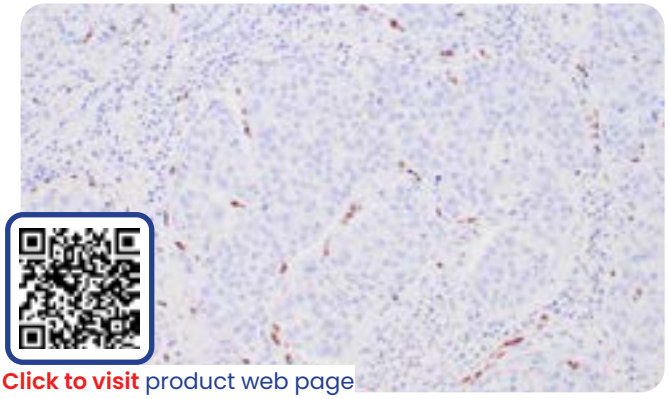
Click to visit product web page

Erythropoietin *(clone ZM135)*

Recombinant. ZM135 recognizes Erythropoietin (EPO), a 37kDa secreted, glycosylated cytokine hormone composed of four alpha helical bundles. It acts as the primary factor regulating erythropoiesis during steady-state conditions and in response to blood loss or adult hemorrhage. Synthesized by the kidney, it stimulates bone marrow erythroid precursor cell proliferation and maturation. Found in v plasma, Erythropoietin regulates red cell production by actively promoting erythroid differentiation and initiating essential hemoglobin synthesis.

Species: Mouse Monoclonal **Cat#:** Z2445 ›››

IHC: Human kidney stained with ZM135



Click to visit product web page

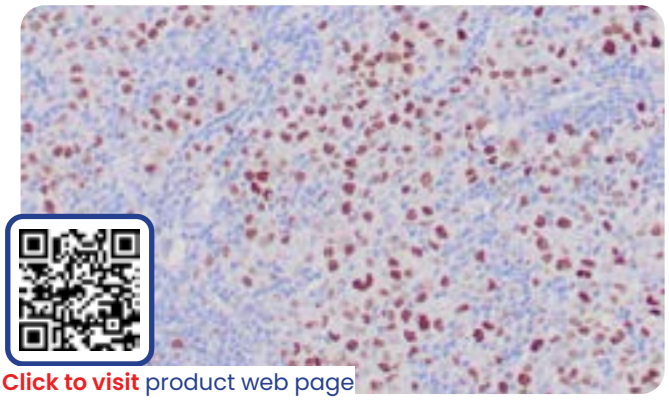
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

EZH2 *(clone ZR150)*

Recombinant. ZR150 recognizes EZH2 (Enhancer of Zeste Homolog 2), the catalytic subunit of polycomb repressive complex 2 (PRC2) that silences gene expression. EZH2 target genes regulate stem cell pluripotency, cell proliferation, and oncogenic transformation. Absent in normal breast ductal epithelium, it is expressed in prostate, breast, uterine, gastric, renal, small-cell lung cancers, melanoma, and lymphomas. It occurs in follicular centers but avoids mantle zones, interfollicular T cells, plasma cells, or NK/T cells.

Species: Rabbit Monoclonal **Cat#:** Z2692 ›››

IHC: Human breast ductal carcinoma stained with ZR150



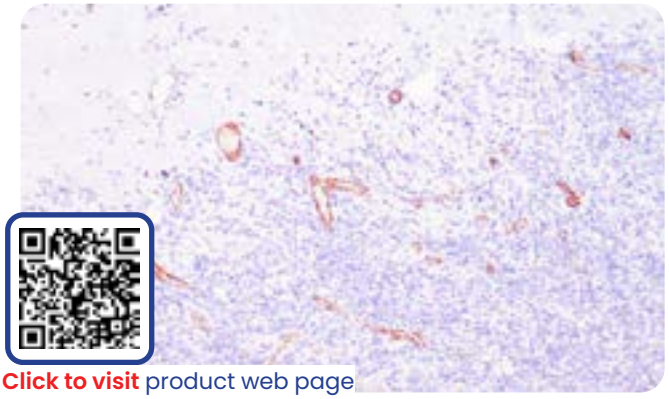
Click to visit product web page

Factor VIII-R *(clone ZM64)*

ZM64 recognizes Factor VIII-R (von Willebrand factor), a multimeric glycoprotein mediating platelet adhesion to injured vessel walls while stabilizing coagulation factor VIII. Serving as a crucial endothelial or megakaryocytic lineage marker, it stains normal, reactive, and neoplastic blood and lymphatic vessels with finely granular cytoplasmic reactivity. It reacts with endocardium, platelets, and megakaryocytes to measure angiogenesis, though thirty percent of vascular tumors fail to stain regardless of malignancy.

Species: Mouse Monoclonal **Cat#:** Z2393 ›››

IHC: Human tonsil stained with ZM64



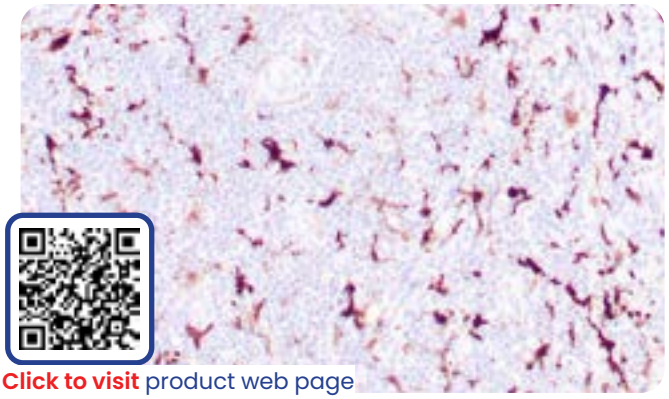
Click to visit product web page

Factor XIIIa *(clone ZM84)*

ZM84 recognizes Factor XIIIa, an 83kDa fibrin-stabilizing factor and marker of fibrohistiocytic proliferations derived from monocyte and macrophage myeloid lineages. Expressed in dermal dendrocytes, platelets, megakaryocytes, and fibroblast-like mesenchymal cells, it helps differentiate positive dermatofibroma from negative desmoplastic malignant melanoma. Positivity also occurs in capillary hemangioblastoma, hemangioendothelioma, hemangiopericytoma, xanthogranuloma, xanthoma, hepatocellular carcinoma, glomus tumor, and meningioma, while remaining widely expressed across various placenta, uterus, and prostate cells.

Species: Mouse Monoclonal **Cat#:** Z2394 ›››

IHC: Human neuroblastoma stained with ZM84



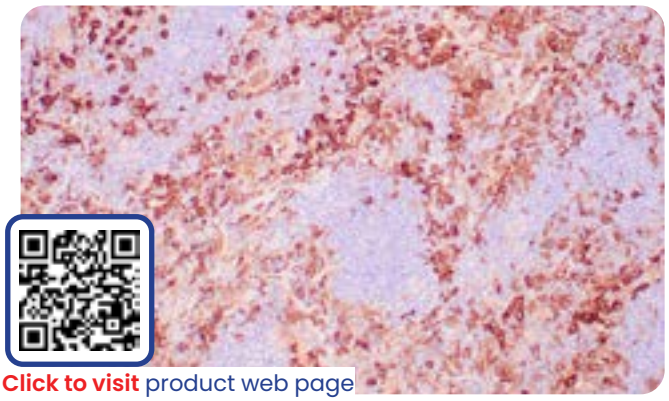
Click to visit product web page

Fascin *(clone ZM192)*

Recombinant. ZM192 recognizes Fascin, an actin-bundling protein forming tight cytoplasmic bundles with filamentous actin. Encoded by the human homolog for sn (hsn) gene, it localizes to microspikes and stress fibers to drive microfilament bundle formation. Fascin is expressed predominantly in dendritic cells, whereas lymphoid, myeloid, and plasma cells remain negative. Notably, Reed Sternberg cells in Hodgkin's lymphoma test positive for Fascin, making this specific clone an effective marker for Reed Sternberg cells.

Species: Mouse Monoclonal **Cat#:** Z2446 ›››

IHC: Human Hodgkin lymphoma stained with ZM192



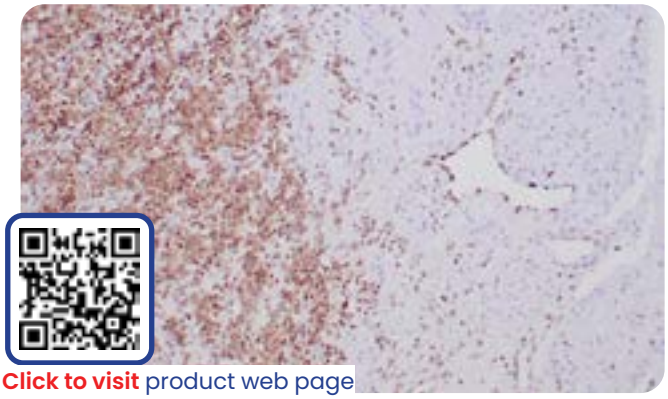
Click to visit product web page

FLI-1 (clone ZR217)

Recombinant. ZR217 recognizes FLI-1 (Friend Leukemia Integration 1), a 51kDa DNA-binding transcription factor involved in cellular proliferation and tumorigenesis. This member of the ETS family helps pathologists differentiate Ewing Sarcoma from other round blue cell tumors, blastema predominant Wilms tumors, small cell osteosarcomas, and mesenchymal chondrosarcomas. It is involved in 90% of Ewing's Sarcoma and Primitive Neuroectodermal Tumors. Additionally, FLI-1 diagnoses benign or malignant vascular tumors, labeling normal endothelial cells, small lymphocytes, angiosarcomas, and Kaposi's Sarcomas.

Species: Rabbit Monoclonal **Cat#:** Z2498 ›››

IHC: Human Ewing's sarcoma stained with ZR217



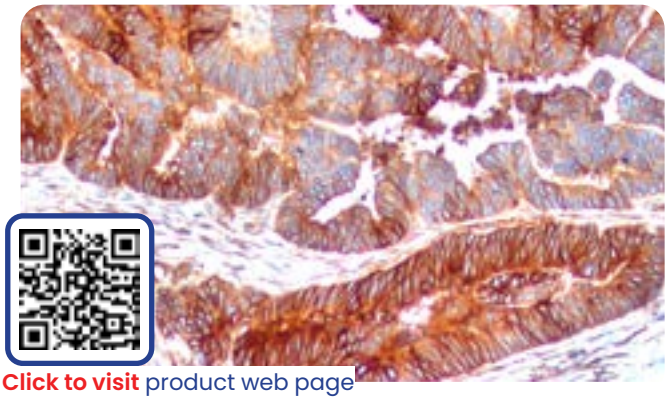
Click to visit product web page

FOLR1 (clone ZR480)

Recombinant. ZR480 recognizes FOLR1 (Folate Receptor Alpha), a membrane-bound cysteine-rich cell-surface receptor binding and transporting folate into cells via endocytosis. Overexpression provides a tumor growth advantage by increasing folate uptake, elevating levels in epithelial ovarian, breast, brain, lung, and colorectal cancers. Serving as a key tumor marker in high-grade serous ovarian carcinoma and serous endometrial carcinomas, it helps distinguish malignancies from benign tumors, correlating directly with aggressive tumor biology.

Species: Rabbit Monoclonal **Cat#:** Z2850 ›››

IHC: Human ovarian serous carcinoma stained with ZR480



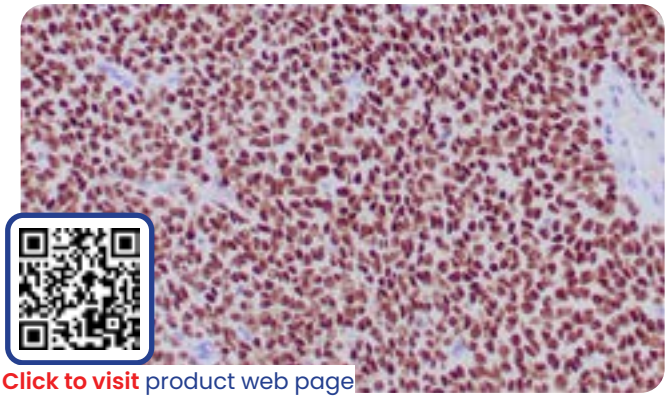
Click to visit product web page

FOXL2 (clone ZR399)

Recombinant. ZR399 recognizes FOXL2 (Forkhead Box L2), a forkhead box transcription factor critical for ovary differentiation and suppressing the genetic program for somatic testis determination. Expressed early in female gonad development, it drives granulosa cell differentiation during folliculogenesis and maintains strong expression throughout life. FOXL2 blocks trans-differentiation of the ovary to testis by repressing SOX9. It is used to diagnose sex cord-stromal tumors alongside inhibin, calretinin, and SF-1.

Species: Rabbit Monoclonal **Cat#:** Z2755 ›››

IHC: Human adult granulosa cell tumor stained with ZR399



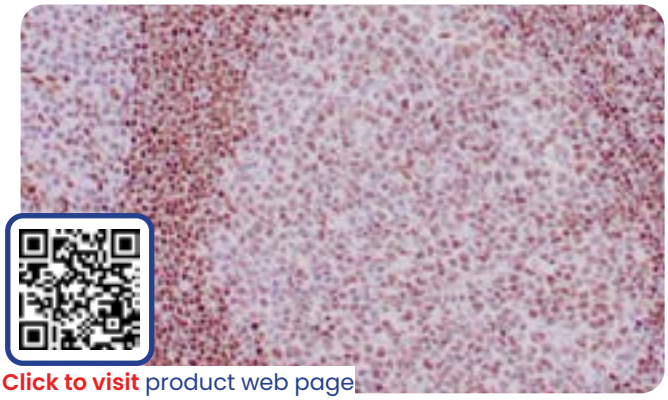
Click to visit product web page

FOXP1 (clone ZR333)

Recombinant. ZR333 recognizes FOXP1 (Forkhead bOX Protein 1), a transcriptional repressor regulating lung epithelium specification and differentiation. Acting as an essential B-cell development regulator, it cooperates with CTBP1 and FOXP4 to repress transcription and control lung secretory epithelial cell fate during regeneration. FOXP1 helps subclassify diffuse large B-cell lymphoma (DLBCL); applying a high cutoff of at least eighty percent positivity yields exceptional diagnostic specificity for identifying the ABC subtype.

Species: Rabbit Monoclonal **Cat#:** Z2639 ›››

IHC: Human tonsil stained with ZR333



Click to visit product web page

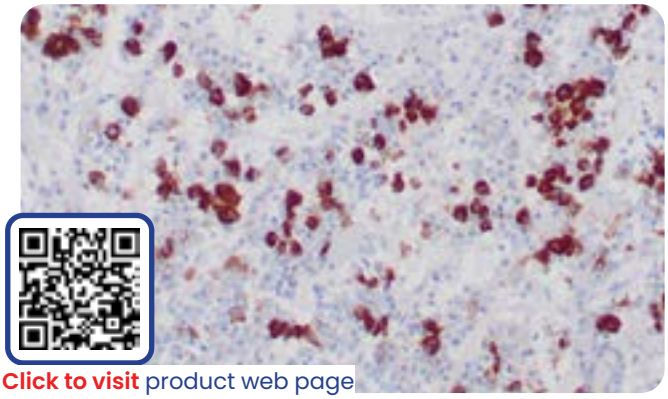
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

FSH *(clone ZR246)*

Recombinant. ZR246 recognizes FSH (Follicle Stimulating Hormone), a hormone synthesized and secreted by gonadotrophs in the anterior pituitary gland. This antibody reacts with a protein of 22kDa identified as the beta subunit of FSH, demonstrating zero cross-reactivity with the alpha subunit. It coordinates with LH to act synergistically in human reproduction, stimulating Graafian follicle maturation and driving spermatogenesis. Consequently, it serves as a highly useful diagnostic marker for classifying pituitary tumors and studying underlying pituitary disease.

Species: Rabbit Monoclonal **Cat#:** Z2721 ›››

IHC: Human normal pituitary stained with ZR246



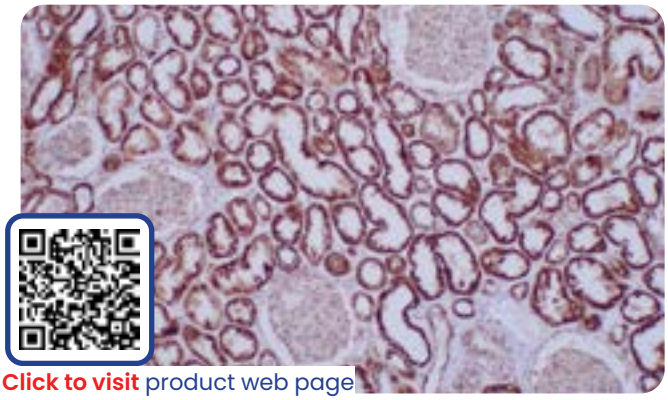
Click to visit product web page

Fumarate Hydratase *(clone ZR458)*

Recombinant. ZR458 recognizes Fumarate Hydratase (FH), a Krebs cycle enzyme catalyzing the reversible hydration of fumarate to malate. Normal mitochondria-rich tissues like kidney and liver stain strongly, whereas germline mutations cause Hereditary Leiomyomatosis and Renal Cell Cancer (HLRCC). This genetic syndrome predisposes individuals to benign smooth muscle leiomyomas and aggressive renal cell carcinomas. Immunohistochemistry successfully identifies underrecognized, deficient pheochromocytomas and paragangliomas, which carry an elevated metastatic risk associated with germline missense mutations.

Species: Rabbit Monoclonal **Cat#:** Z2819 ›››

IHC: Human kidney stained with ZR458



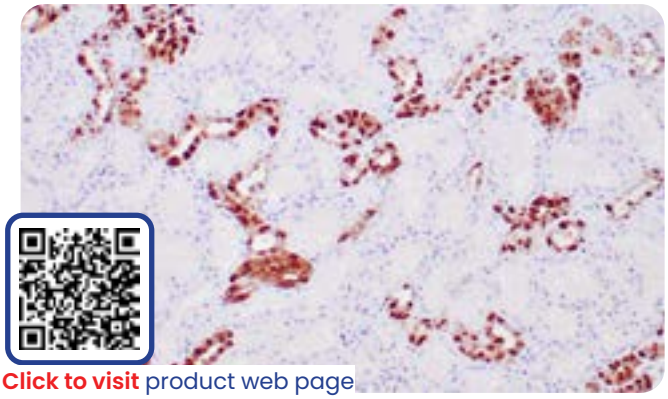
Click to visit product web page

Galectin-3 *(clone ZM182)*

Recombinant. ZM182 recognizes Galectin-3, a beta-galactoside-binding lectin family member associated with cell growth, adhesion, inflammation, mRNA processing, and apoptosis. Aberrant expression drives malignant transformation and metastasis in breast, colon, and thyroid carcinomas. It localizes to the nucleus of neutrophils, vascular endothelium, and various carcinoma cells. This antibody functions as a valuable diagnostic tool to differentiate benign from malignant thyroid neoplasms, while also aiding in the clinical identification of certain liver disorders.

Species: Mouse Monoclonal **Cat#:** Z2487 ›››

IHC: Human kidney stained with ZM182



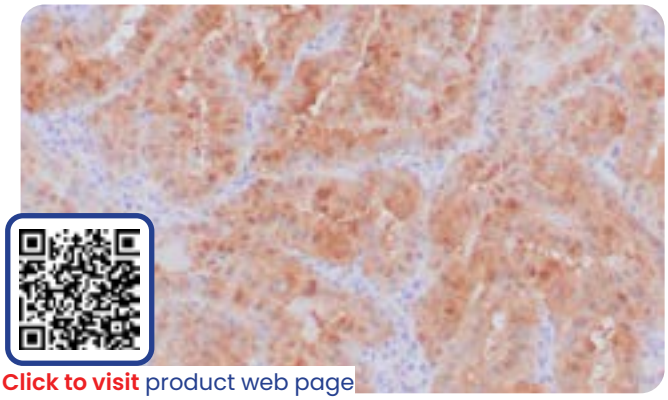
Click to visit product web page

Galectin-3 *(clone ZR430)*

Recombinant. ZR430 recognizes Galectin-3, a beta-galactoside-binding lectin family member associated with cell growth, adhesion, inflammation, mRNA processing, and apoptosis. Aberrant expression drives malignant transformation and metastasis in breast, colon, and thyroid carcinomas. It localizes to the nucleus of neutrophils, vascular endothelium, and various carcinoma cells. This antibody functions as a valuable diagnostic tool to differentiate benign from malignant thyroid neoplasms, while also aiding in the clinical identification of certain liver disorders.

Species: Rabbit Monoclonal **Cat#:** Z2786 ›››

IHC: Human thyroid papillary carcinoma stained with ZR430



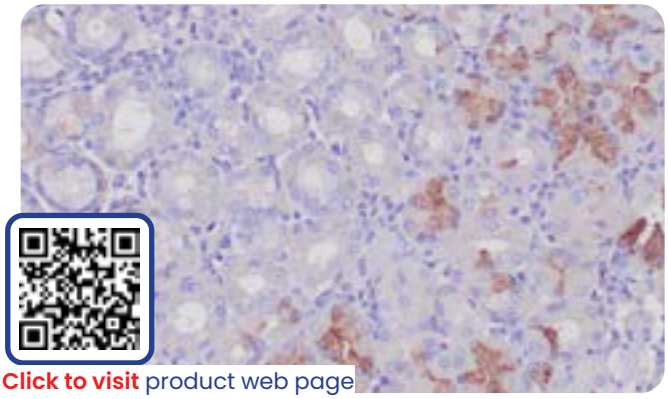
Click to visit product web page

Gastrin *(clone ZM359)*

ZM359 recognizes Gastrin, a hormone stimulating gastric mucosa hydrochloric acid secretion and acting as a mitogenic factor for gastrointestinal epithelial cells. It possesses two biologically active peptide forms, G34 and G17, which activate CCK-1 and CCK-2 receptors. This antibody selectively stains G-cells of normal antral or pyloric mucosa and gastrin-producing tumors. Conversely, it avoids other cells or tissue types, reacting with both sulfated and non-sulfated forms of Gastrin without cross-reactivity.

Species: Mouse Monoclonal **Cat#:** Z2735 ›››

IHC: Human gastric antral mucosa stained with ZM359



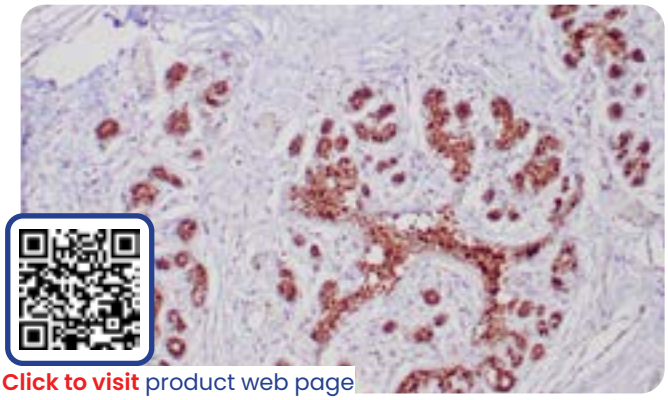
Click to visit product web page

GATA-3 *(clone ZR358)*

Recombinant. ZR358 recognizes GATA-3 (GATA binding protein 3), a 50kDa nuclear transcription factor regulating development across hematopoietic, skin, kidney, mammary, and central nervous system tissues. It drives luminal cell differentiation and controls genes regulating breast cancer proliferation. Strongly linked to estrogen receptor-alpha expression, GATA-3 serves as a novel marker for bladder cancer. Studies confirm it stains sixty-seven percent of urothelial carcinomas, while completely avoiding prostate or renal carcinomas to ensure lineage determination.

Species: Rabbit Monoclonal **Cat#:** Z2742 ›››

IHC: Human breast ductal carcinoma stained with ZR358



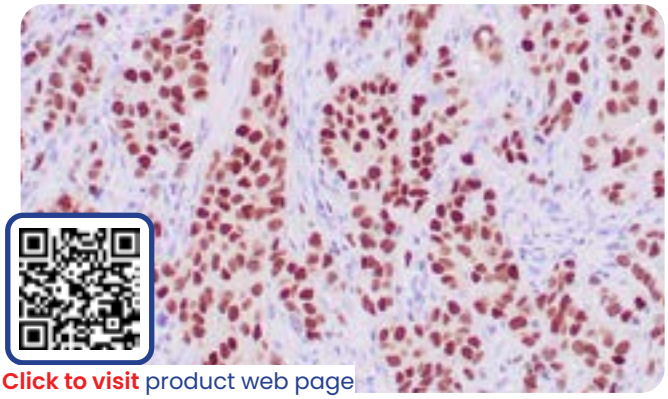
Click to visit product web page

GATA-3 *(clone L50-823)*

L50-823 recognizes GATA-3 (GATA binding protein 3), a 50kDa nuclear transcription factor regulating development across hematopoietic, skin, kidney, mammary, and central nervous system tissues. It drives luminal cell differentiation and controls genes regulating breast cancer proliferation. Strongly linked to estrogen receptor-alpha expression, GATA-3 serves as a novel marker for bladder cancer. Studies confirm it stains sixty-seven percent of urothelial carcinomas, while completely avoiding prostate or renal carcinomas to ensure lineage determination.

Species: Mouse Monoclonal **Cat#:** Z2227 ›››

IHC: Human breast carcinoma stained with L50-823



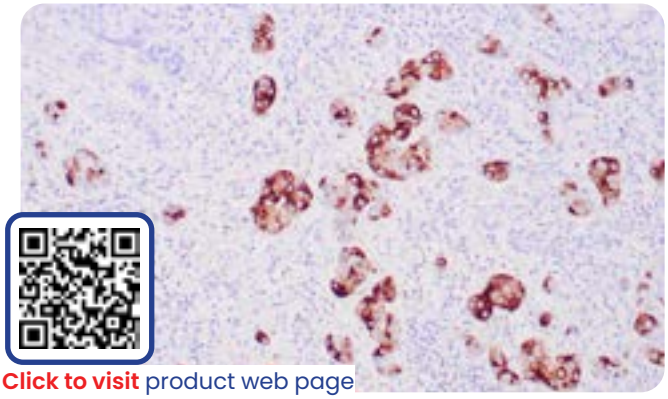
Click to visit product web page

GCDFP-15 *(clone ZM23)*

ZM23 recognizes GCDFP-15, a protein regulated by prolactin and androgens and a major component of benign breast gross cyst fluid. It serves as a specific tumor marker expressed in approximately sixty percent of breast cancers, functioning as an essential tool to identify metastatic breast lesions when paired with Mammaglobin. Furthermore, it is considered a marker of apocrine differentiation, highlighting axillary sweat glands and submandibular glands within routine formalin-fixed, paraffin-embedded tissues.

Species: Mouse Monoclonal **Cat#:** Z2345 ›››

IHC: Human breast tissue stained with ZM23



Click to visit product web page

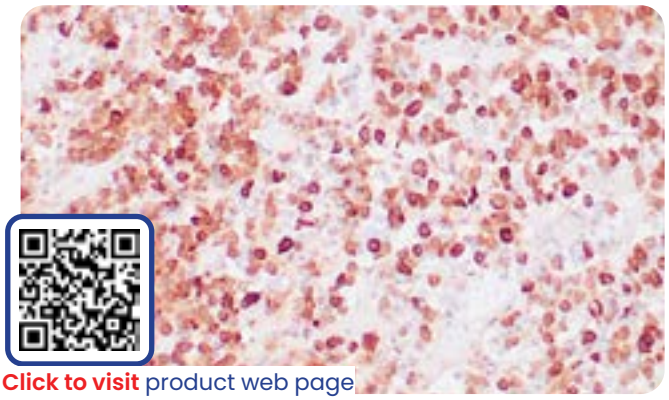
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

GFAP *(clone GA-5)*

GA-5 recognizes GFAP (Glial Fibrillary Acidic Protein), a 50kDa protein localizing benign astrocytes and neoplastic cells of glial origin. Highly sensitive in routine tissues, it avoids cross-reactivity with other intermediate filaments. It is specific to astrocytes and ependymal cells, labeling glial cells and derived tumors. This marker differentiates primary gliomas from metastatic brain lesions, documents astrocytic differentiation outside the CNS, and avoids neuroblastomas, schwannomas, or extra-CNS tumors.

Species: Mouse Monoclonal **Cat#:** Z2255 ›››

IHC: Human brain stained with GA-5



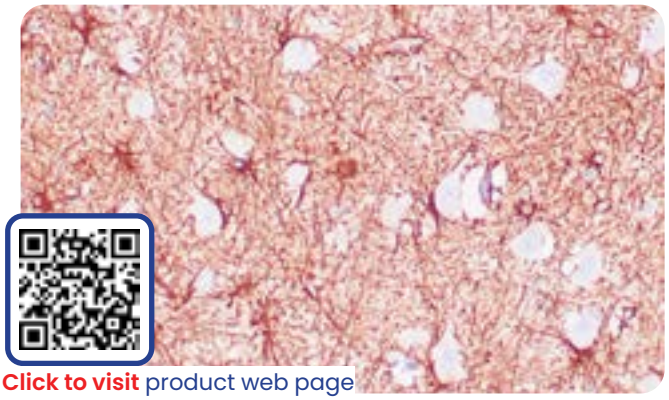
Click to visit product web page

GFAP *(clone ZR356)*

Recombinant. ZR356 recognizes GFAP (Glial Fibrillary Acidic Protein), a 50kDa protein localizing benign astrocytes and neoplastic cells of glial origin. Highly sensitive in routine tissues, it avoids cross-reactivity with other intermediate filaments. It is specific to astrocytes and ependymal cells, labeling glial cells and derived tumors. This marker differentiates primary gliomas from metastatic brain lesions, documents astrocytic differentiation outside the CNS, and avoids neuroblastomas, schwannomas, or extra-CNS tumors.

Species: Rabbit Monoclonal **Cat#:** Z2386 ›››

IHC: Human brain stained with ZR356



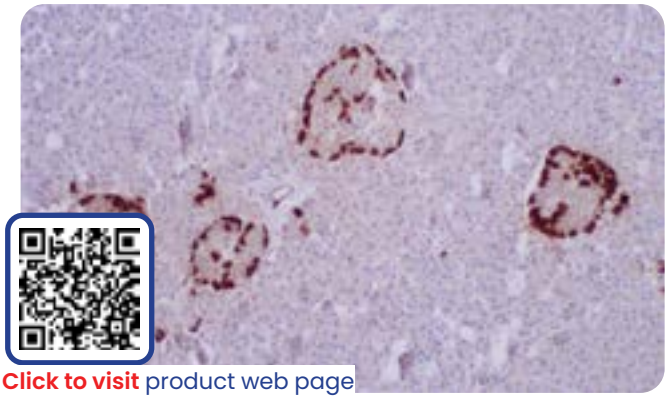
Click to visit product web page

Glucagon *(clone ZR470)*

Recombinant. ZR470 recognizes Glucagon, a pancreatic hormone synthesized and released by alpha-cells of the islets of Langerhans. Operating as an insulin antagonist, it stimulates glycogen conversion to glucose to raise blood sugar levels. This glucagon family antibody detects glucagon-secreting cells and related neuroendocrine tumors such as glucagonomas, of which approximately eighty percent are clinically malignant. Additionally, it belongs to a family encompassing GLP-1, GLP-2, VIP, and pituitary adenylate cyclase-activating polypeptide.

Species: Rabbit Monoclonal **Cat#:** Z2830 ›››

IHC: Human pancreas stained with ZR470



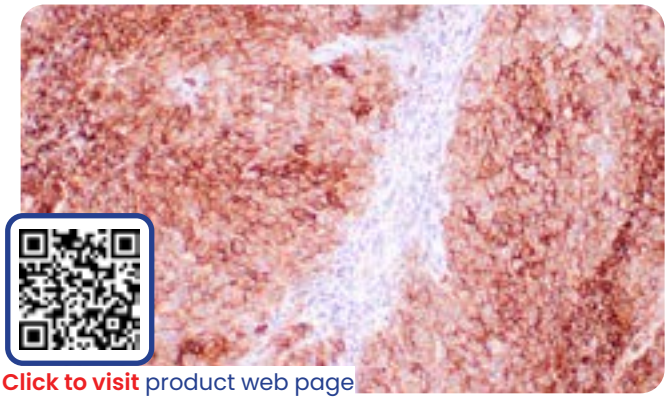
Click to visit product web page

GLUT-1 *(clone ZM137)*

Recombinant. ZM137 recognizes GLUT-1 (Glucose Transporter isoform 1), a 55kDa integral membrane glycoprotein. It acts as the major glucose transport carrier protein within the mammalian blood-brain barrier. Expressed heavily on human erythrocytes and brain capillaries, variable levels occur across many human tissues. Overexpression links directly to tumor progression or poor survival in colon, breast, cervical, lung, bladder, and mesothelioma carcinomas. It serves as a highly sensitive, specific marker to differentiate positive malignant mesothelioma from negative reactive mesothelium.

Species: Mouse Monoclonal **Cat#:** Z2448 ›››

IHC: Human breast carcinoma stained with ZM137



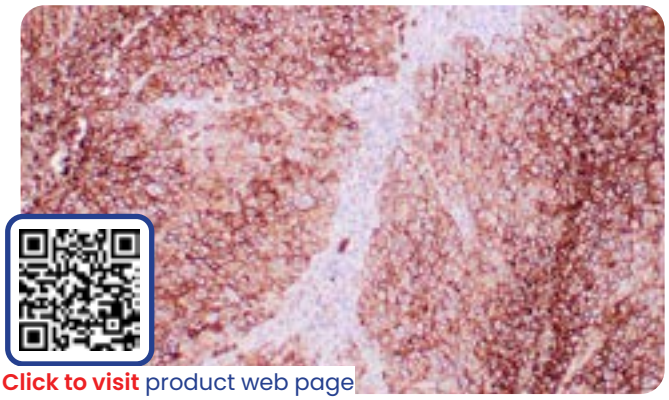
Click to visit product web page

GLUT-1 *(clone ZR308)*

Recombinant. ZR308 recognizes GLUT-1 (Glucose Transporter isoform 1), a 55kDa integral membrane glycoprotein. It acts as the major glucose transport carrier protein within the mammalian blood-brain barrier. Expressed heavily on human erythrocytes and brain capillaries, variable levels occur across many human tissues. Overexpression links directly to tumor progression or poor survival in colon, breast, cervical, lung, bladder, and mesothelioma carcinomas. It serves as a highly sensitive, specific marker to differentiate positive malignant mesothelioma from negative reactive mesothelium.

Species: Rabbit Monoclonal **Cat#:** Z2585 ›››

IHC: Human breast carcinoma stained with ZR308



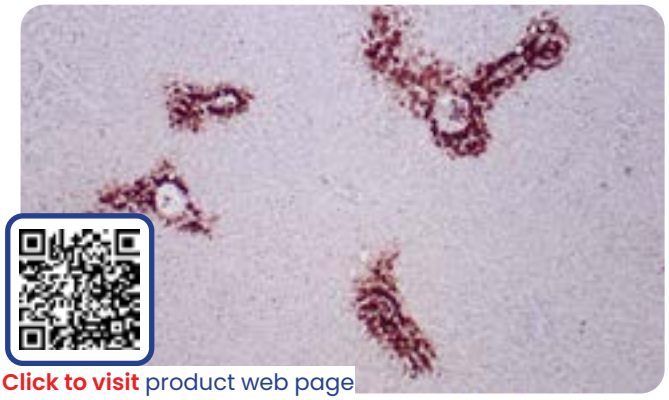
Click to visit product web page

Glutamine Synthetase *(clone ZM377)*

Recombinant. ZM377 recognizes Glutamine Synthetase (GS), a homo-octamer enzyme catalyzing the amination of glutamic acid to form glutamine. Serving as a reliable marker for astrocytes, its induction depends strictly upon astrocyte contact with neurons. Elevated expression in glial cells protects neurons from degeneration caused by excess glutamate. It is also present in the liver for nitrogen homeostasis, where overexpression indicates hepatocyte transformation in primary liver cancers, strongly highlighting most hepatocellular carcinomas including early and low-grade cases.

Species: Mouse Monoclonal **Cat#:** Z2668 ›››

IHC: Human liver stained with ZM377



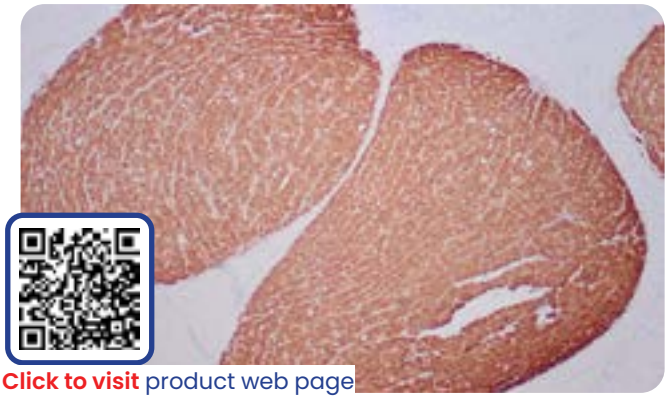
Click to visit product web page

Glutamine Synthetase *(clone ZR431)*

Recombinant. ZR431 recognizes Glutamine Synthetase (Gl Syn), a homo-octamer enzyme catalyzing the amination of glutamic acid to form glutamine. Serving as a reliable marker for astrocytes, its induction depends strictly upon astrocyte contact with neurons. Elevated expression in glial cells protects neurons from degeneration caused by excess glutamate. It is also present in the liver for nitrogen homeostasis, where overexpression indicates hepatocyte transformation in primary liver cancers, strongly highlighting most hepatocellular carcinomas including early and low-grade cases.

Species: Rabbit Monoclonal **Cat#:** Z2787 ›››

IHC: Human liver stained with ZR431



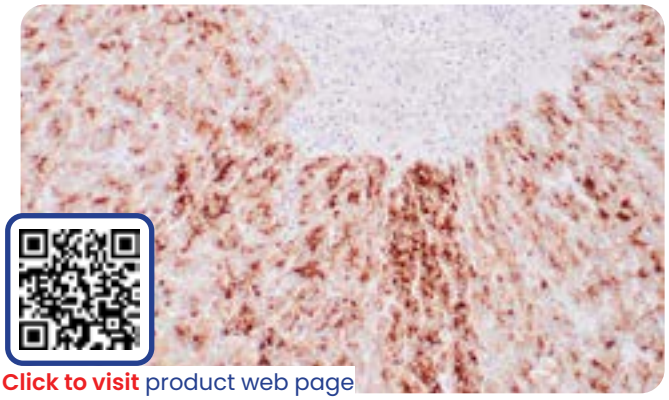
Click to visit product web page

Glypican-3 *(clone 1G12)*

1G12 recognizes Glypican-3 (GCP3), a glycosylphosphatidylinositol-anchored membrane protein and secretable tumor marker diagnosing hepatocellular carcinoma, hepatoblastoma, melanoma, testicular germ cell tumors, and Wilms tumor. It is overexpressed in neoplastic liver tissue but undetectable in normal or benign liver. It is higher in hepatocellular carcinoma than cirrhotic liver, dysplastic nodules, or hepatic adenomas. Expression is upregulated in yolk sac tumors, choriocarcinoma, and embryonal tumors, alongside one hundred percent of follicular carcinomas and seventy percent of papillary thyroid carcinomas.

Species: Mouse Monoclonal **Cat#:** Z2103 ›››

IHC: Human hepatocellular carcinoma stained with 1G12



Click to visit product web page

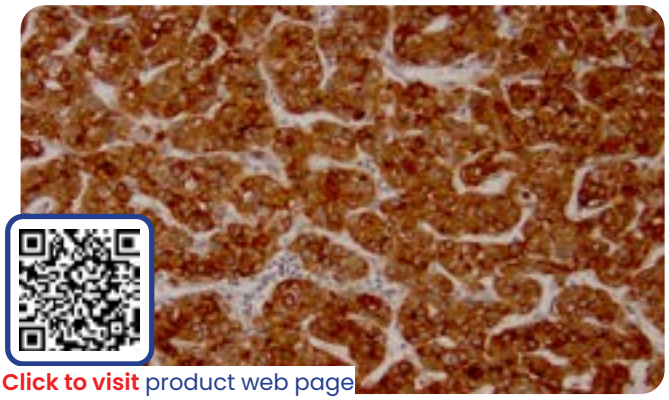
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

Glypican-3 (clone ZR405)

Recombinant. ZR405 recognizes Glypican-3 (GCP3), a glycosylphosphatidylinositol-anchored membrane protein and secretable tumor marker diagnosing hepatocellular carcinoma, hepatoblastoma, melanoma, testicular germ cell tumors, and Wilms tumor. It is overexpressed in neoplastic liver tissue but undetectable in normal or benign liver. It is higher in hepatocellular carcinoma than cirrhotic liver, dysplastic nodules, or hepatic adenomas. Expression is upregulated in yolk sac tumors, choriocarcinoma, and embryonal tumors, alongside one hundred percent of follicular carcinomas and seventy percent of papillary thyroid carcinomas.

Species: Rabbit Monoclonal **Cat#:** Z2761 ›››

IHC: Human hepatocellular carcinoma stained with ZR405



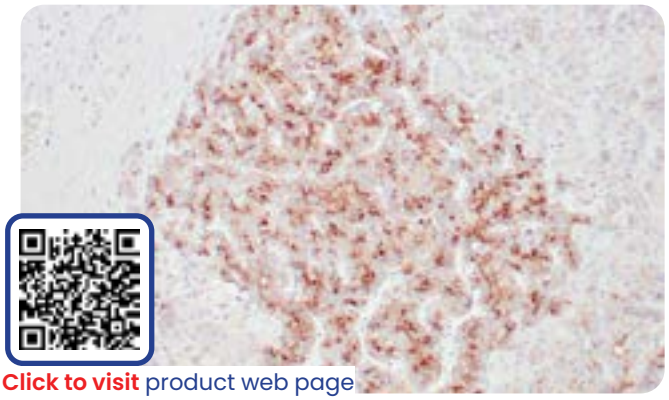
Click to visit product web page

Glypican-3 (clone ZM138)

Recombinant. ZM138 recognizes Glypican-3 (GCP3), a glycosylphosphatidylinositol-anchored membrane protein and secretable tumor marker diagnosing hepatocellular carcinoma, hepatoblastoma, melanoma, testicular germ cell tumors, and Wilms tumor. It is overexpressed in neoplastic liver tissue but undetectable in normal or benign liver. It is higher in hepatocellular carcinoma than cirrhotic liver, dysplastic nodules, or hepatic adenomas. Expression is upregulated in yolk sac tumors, choriocarcinoma, and embryonal tumors, with low or undetectable expression found across normal adjacent tissues.

Species: Mouse Monoclonal **Cat#:** Z2449 ›››

IHC: Human hepatocellular carcinoma stained with ZM138



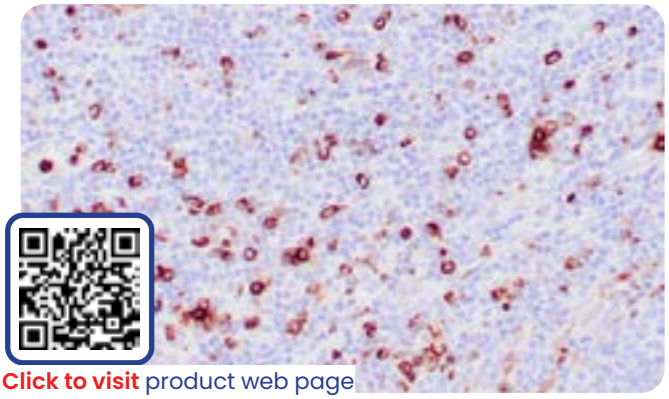
Click to visit product web page

Granzyme B (clone ZM66)

Recombinant. ZM66 recognizes Granzyme B, a granule serine protease stored specifically in NK cells or cytotoxic T cells. Cytolytic T lymphocytes and natural killer cells recognize, bind, and lyse specific target cells bearing foreign antigens. This antibody induces rapid cell apoptosis by CTLs in cell-mediated immune responses. It serves as a useful diagnostic marker to identify NK/T-cell lymphomas, where high percentages of cytotoxic T-cells function as an unfavorable clinical prognostic indicator in Hodgkin's Disease.

Species: Mouse Monoclonal **Cat#:** Z2376 ›››

IHC: Human tonsil stained with ZM66



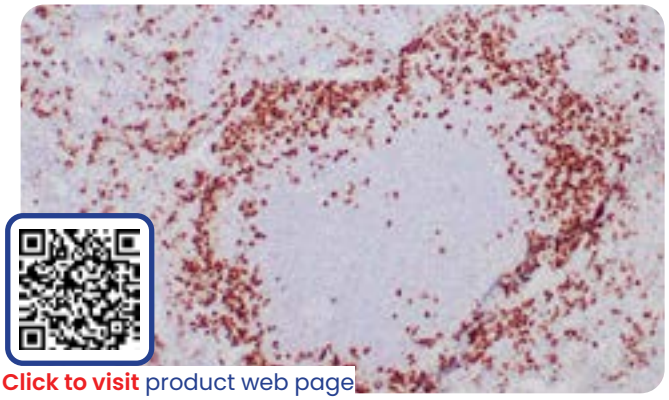
Click to visit product web page

Granzyme B (clone ZR432)

Recombinant. ZR432 recognizes Granzyme B, a granule serine protease stored specifically in NK cells or cytotoxic T cells. Cytolytic T lymphocytes and natural killer cells recognize, bind, and lyse specific target cells bearing foreign antigens. This antibody induces rapid cell apoptosis by CTLs in cell-mediated immune responses. It serves as a useful diagnostic marker to identify NK/T-cell lymphomas, where high percentages of cytotoxic T-cells function as an unfavorable clinical prognostic indicator in Hodgkin's Disease.

Species: Rabbit Monoclonal **Cat#:** Z2788 ›››

IHC: Human tonsil stained with ZR432



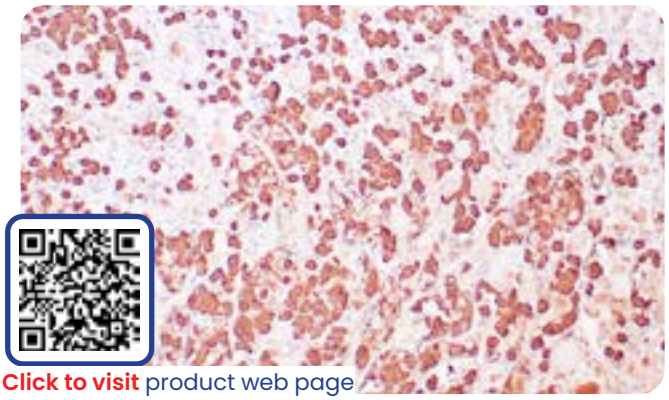
Click to visit product web page

Growth Hormone *(clone ZM140)*

Recombinant. ZM140 recognizes pituitary Growth Hormone (GH), which plays a crucial role in stimulating and controlling growth, metabolism and differentiation of many mammalian cell types. These effects are mediated by binding to its membrane-bound receptor, involving a phosphorylation cascade that results in modulation of signaling pathways. Growth Hormone is synthesized by acidophilic or somatotropic cells of the anterior pituitary gland. This antibody is a useful marker in classification of pituitary tumors and study of pituitary disease (acromegaly).

Species: Mouse Monoclonal **Cat#:** Z2451 >>>

IHC: Human pituitary stained with ZM140



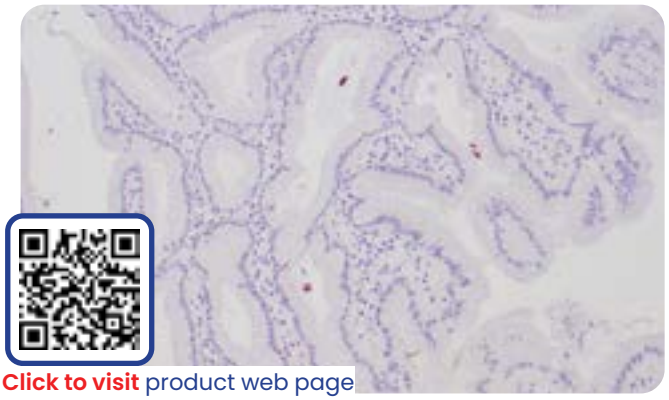
Click to visit product web page

H. pylori Cocktail *(polyclonal)*

Recognizes H. pylori (Helicobacter pylori), which is known to cause peptic ulcers and chronic gastritis in human. This infection is associated with duodenal ulcers and may be involved in development of adenocarcinoma and low-grade mucosa associated lymphoid tissue lymphoma in the stomach. The antibody cocktail reacts with H pylori on the surface and in the cytoplasm of epithelial cells of stomach biopsies. Immunohistochemistry provides rapid detection of this bacterium, which plays an important role in chronic active gastritis.

Species: Rabbit Polyclonal **Cat#:** Z2046 >>>

IHC: Human stomach stained with H. Pylori Cocktail



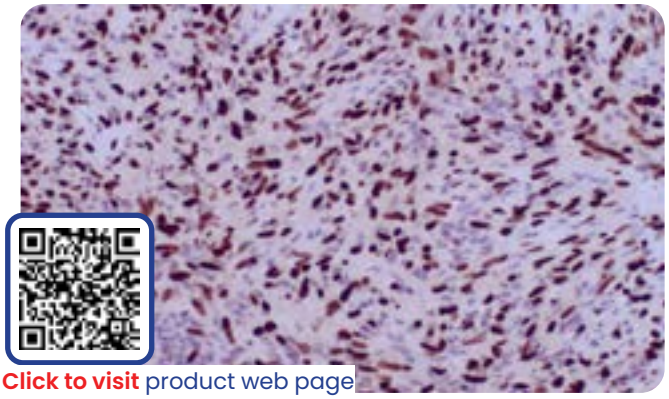
Click to visit product web page

H3.3 G34W *(clone ZR459)*

Recombinant. ZR459 recognizes H3.3 G34W, a variant of the histone H3 protein incorporated into chromatin in a replication-independent manner. This specific mutation, where glycine 34 is replaced by tryptophan, is significant in pediatric gliomas and malignant giant cell tumor of bone. The antibody provides a mutation-specific immunohistochemical stain against the G34W mutation in histone 3F3A. Nuclear immunoreactivity by this antibody supports the diagnosis of giant cell tumor of bone (~95%) and some types of gliomas.

Species: Rabbit Monoclonal **Cat#:** Z2820 >>>

IHC: Human malignant giant cell tumor of bone stained with ZR459



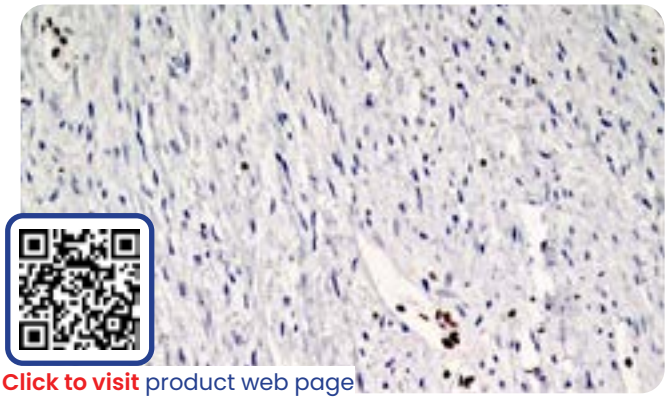
Click to visit product web page

NEW! H3K27me3 *(clone ZR473)*

Recombinant. ZR473 recognizes H3K27me3, a nuclear epigenetic mark with important diagnostic value in surgical pathology, particularly in nerve sheath tumors, meningiomas, and certain pediatric tumors. This post-translational modification refers to the trimethylation of lysine 27 on histone H3. Loss-of-function somatic alterations of the polycomb repressive complex 2 (PRC2) occur in most malignant peripheral nerve sheath tumors (MPNSTs). Approximately 90% of sporadic and radiation associated MPNSTs show loss of H3K27me3 expression by IHC analysis.

Species: Rabbit Monoclonal **Cat#:** Z2843 >>>

IHC: MPNST stained with ZR473



Click to visit product web page

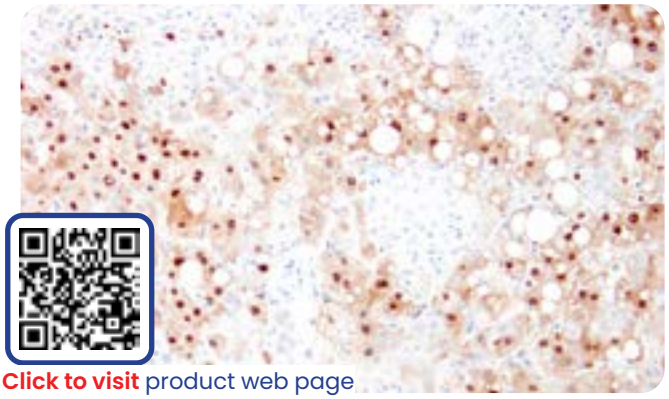
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

HBcAg *(polyclonal)*

Recognizes HBcAg (Hepatitis B virus), which is spherical in shape with a diameter of 42 nm. It contains a 27 nm partially double stranded DNA core enclosed within a lipoprotein coat. The antigenic activity of the nucleocapsid core is designated as hepatitis B core antigen. Core antigens are localized within the nuclei whereas surface antigens are present in the cytoplasm of infected cells. Antibodies to surface antigens appear in circulation early, whereas core antibodies are detected after several weeks.

Species: Rabbit Polyclonal **Cat#:** Z2085 ›››

IHC: Human liver infected with hepatitis B virus stained with HBcAg



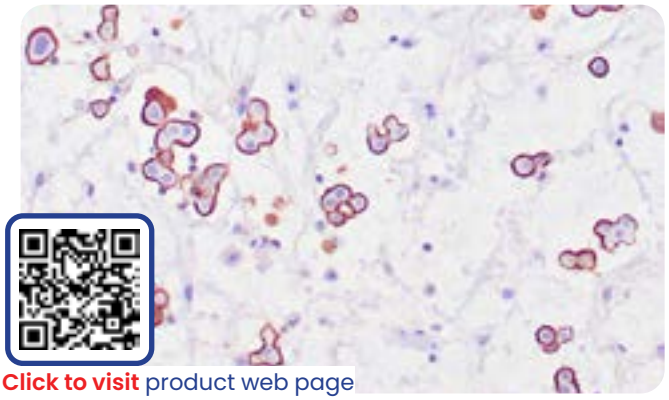
Click to visit product web page

HBME-1 *(clone HBME-1)*

HBME-1 recognizes an unknown antigen present in normal tracheal epithelium, microvilli of mesothelioma cells, and adenocarcinoma of breast, lung, and pancreas. The antibody was first described by Battifora et al. in 1992. HBME-1 shows greater immunostaining with malignant lesions than benign lesions with a membranous or luminal pattern of staining. It serves as an anti-mesothelial monoclonal antibody useful for identifying mesothelioma in a thick membrane pattern, while also rarely reacting with some carcinomas showing cytoplasmic immunostaining.

Species: Mouse Monoclonal **Cat#:** Z2233 ›››

IHC: Human mesothelioma stained with HBME-1



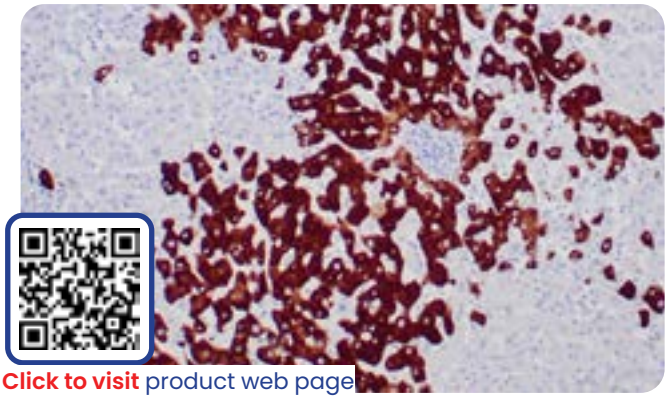
Click to visit product web page

HBsAg *(clone ZR393)*

Recombinant. ZR393 recognizes Hepatitis B surface antigen (HBsAg), a glycoprotein on the surface of the Hepatitis B virus. After infection, HBsAg appears as the first viral marker. It is a multifunctional glycoprotein composed of large, middle, and small subunits. HBsAg antigens are localized within blood, saliva, breast milk, sweat, tears, nasopharyngeal secretions, semen, and vaginal secretions of patients. This expression can serve as a predictor of prognosis for hepatitis B virus-related hepatocellular carcinoma patients.

Species: Rabbit Monoclonal **Cat#:** Z2749 ›››

IHC: Human liver infected by hepatitis B virus stained with ZR393



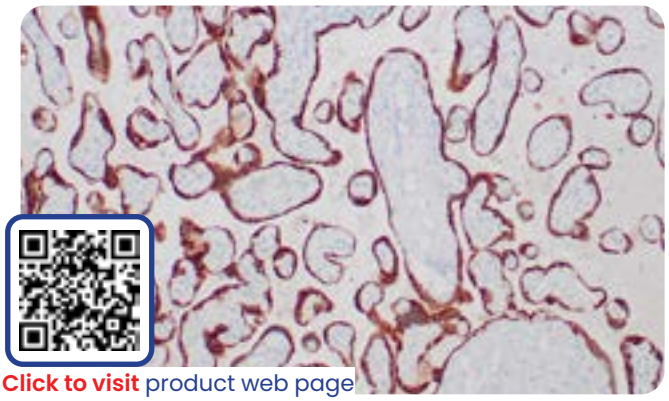
Click to visit product web page

HCG *(clone ZR362)*

Recombinant. ZR362 recognizes Human Chorionic Gonadotropin alpha (hCG), a glycoprotein hormone synthesized in syncytiotrophoblastic cells of the placenta and certain neoplastic tumors. The hCG hormone-specific alpha chains have molecular weights of 13 kDa. It is found in moles and choriocarcinoma, chorionic components of germ cell tumors, and syncytiotrophoblastic cells in seminoma/dysgerminoma and embryonal carcinoma. In diagnostic pathology, hCG is a valuable marker for classifying germ cell tumors and identifying extragonadal tumors.

Species: Rabbit Monoclonal **Cat#:** Z2738 ›››

IHC: Human placenta stained with ZR362



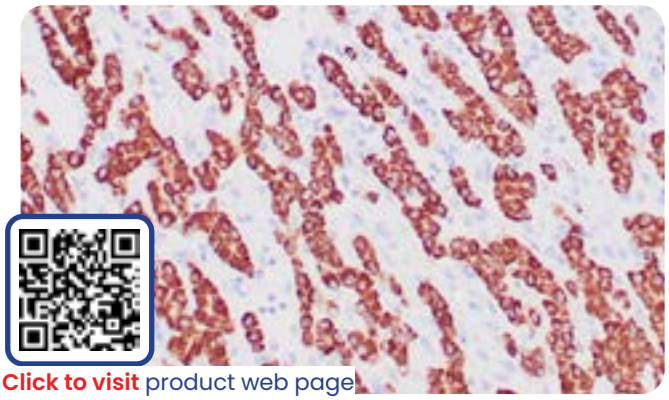
Click to visit product web page

HepPar-1 (clone OCH1E5)

OCH1E5 recognizes HepPar-1, useful in studies of hepatocellular tumors and in differentiating hepatocellular carcinomas from other clear cell malignancies. Expression of HepPar-1 has been shown in the literature to be useful in differentiating hepatoblastoma of embryonal type from small round cell tumors of childhood. This HepPar-1 antibody (clone OCH1E5) labels an epitope in the mitochondrial fraction of the liver homogenate.

Species: Mouse Monoclonal **Cat#:** Z2087 >>>

IHC: Human liver stained with OCH1E5



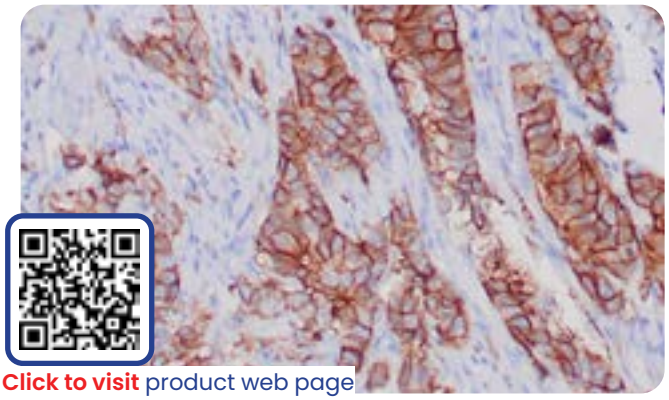
Click to visit product web page

Her-2 Neu (clone ZR218)

Recombinant. ZR218 recognizes a protein of 185kDa also known as c-erbB-2 and a member of the EGFR family. The Her-2/neu antibody is specific and shows minimal cross-reaction with other members of the EGFR-family. Receptors of the EGFR family are located on the plasma membrane and consist of an extracellular ligand-binding domain. Her2/neu protein expression is overexpressed in various carcinomas, especially the breast and ovary. Her2/neu alteration and cycling protein expression are closely linked.

Species: Rabbit Monoclonal **Cat#:** Z2499 >>>

IHC: Human breast infiltrating ductal carcinoma stained with ZR218



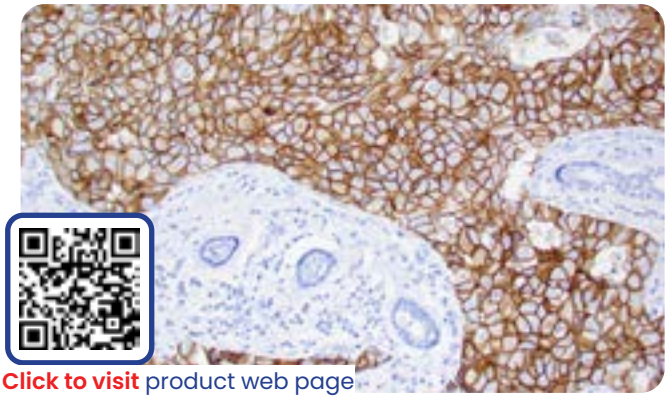
Click to visit product web page

Her-2 Neu (clone ZR5)

Recombinant. ZR5 recognizes a protein of 185kDa also known as c-erbB-2 and a member of the EGFR family. The Her2/neu antibody is specific and shows minimal cross-reaction with other members of the EGFR-family. Receptors of the EGFR family are located on the plasma membrane and consist of an extracellular ligand-binding domain. Her2/neu protein expression is overexpressed in various carcinomas, especially the breast and ovary. Her2/neu alteration and cycling protein expression are closely linked.

Species: Rabbit Monoclonal **Cat#:** Z2025 >>>

IHC: Human breast infiltrating ductal carcinoma stained with ZR5



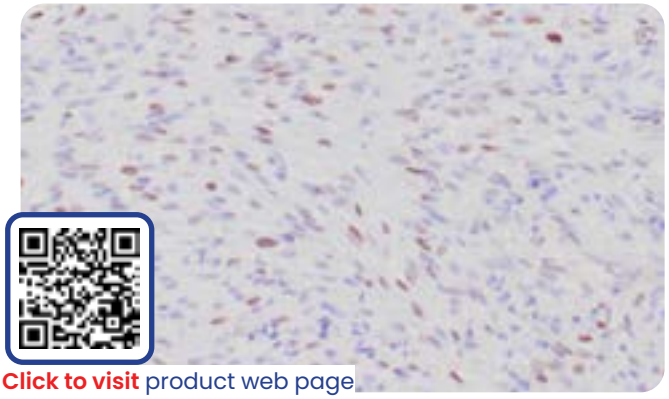
Click to visit product web page

HHV-8 (clone LN53)

Recombinant. LN53 recognizes HHV8, which encodes a latent nuclear antigen (LNA), the product of the viral gene orf 73. LNA is capable of forming a complex with retinoblastoma susceptibility gene product, which may be related to its oncogenic activity. HHV8 is associated with three different diseases observed in AIDS patients: Kaposi's sarcoma, primary effusion lymphoma (a rare type of non-Hodgkin lymphoma affecting body cavities), and multicentric Castleman's disease. HHV8 is the likely etiological agent of Kaposi's sarcoma.

Species: Mouse Monoclonal **Cat#:** Z2650 >>>

IHC: Human Kaposi sarcoma stained with LN53



Click to visit product web page

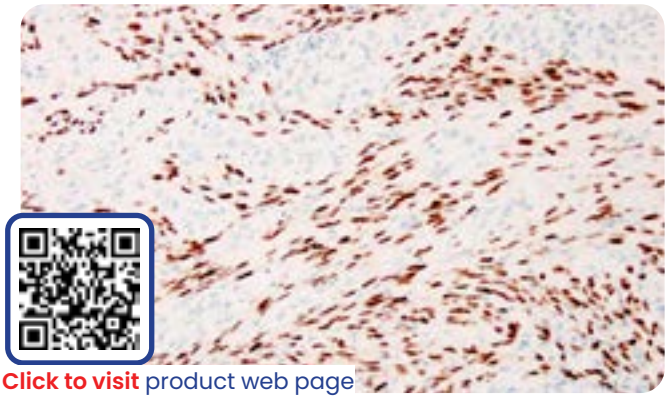
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

HHV-8 (clone ZR106)

Recombinant. ZR106 recognizes HHV8, which encodes a latent nuclear antigen (LNA), which is the product of the viral gene orf73. LNA is capable of forming a complex with retinoblastoma susceptibility gene product, which may be related to its oncogenic activity. HHV8 is associated with three different diseases observed in AIDS patients: Kaposi's sarcoma, primary effusion lymphoma (which is a rare type of non-Hodgkin lymphoma affecting the body cavities) and multicentric Castleman's disease. HHV8 is the likely etiological agent.

Species: Rabbit Monoclonal **Cat#:** Z2531 >>>

IHC: Human Kaposi's sarcoma stained with ZR106



Click to visit product web page

HPV Cocktail (clone CAMVR-1 & C1P5)

Recombinant. CAMVR-1 & C1P5 recognizes HPV (Human papilloma viruses), which can be classified as either high risk or low risk according to their association with cancer. HPV16 and HPV18 are the most common of the high-risk group while HPV6 and HPV11 are among the low risk types. Approximately 90% of cervical cancers contain HPV DNA of the high-risk types. Zeta HPV Antibody Cocktail reacts very strongly with formalin-fixed, paraffin-embedded tissues containing HPV-16, -18 or -33.

Species: Mouse Monoclonal **Cat#:** Z2657 >>>

IHC: Human cervical carcinoma stained with CAMVR-1 & C1P5

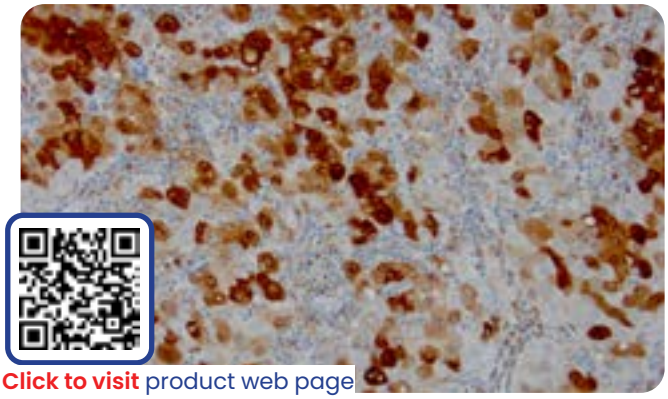
Click to visit product web page

HSP70 (clone ZR152)

Recombinant. ZR152 recognizes HSP70, an intracellularly generated protein. HSP70 is an intronless gene encoding a 70kDa heat shock protein, a member of the heat shock protein 70 families. In conjunction with other heat shock proteins, HSP70 stabilizes existing proteins against aggregation and mediates the folding of newly translated proteins in the cytosol and organelles. HSP70 is an anti-apoptotic regulator promoting cell survival and is implicated in tumorigenesis. In hepatocellular tumors, HSP70 expression increases stepwise.

Species: Rabbit Monoclonal **Cat#:** Z2694 >>>

IHC: Human hepatocellular carcinoma stained with ZR152



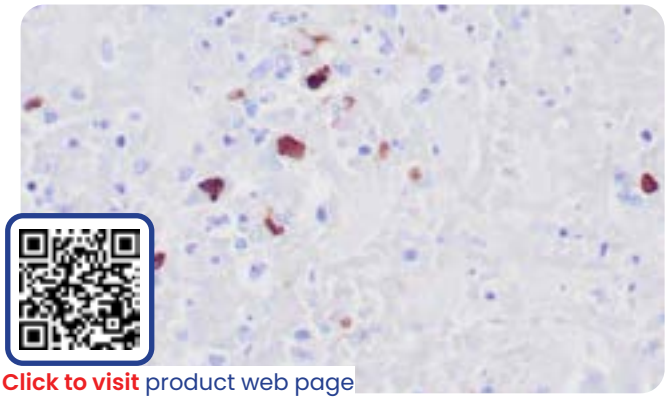
Click to visit product web page

HSV1 (clone 10A3)

Recombinant. 10A3 recognizes HSV1 and HSV2. There are two main types of Herpes Simplex Virus (HSV), 1 and 2. HSV 1 generally appears in the orofacial organs, whereas HSV 2 usually resides in the sacral ganglion at the base of the spine. The HSV1/2 antibody cocktail reacts with HSV type 1 and type 2 specific antigens common to both types. It is well-suited for detecting HSV in human cellular and tissue materials from superficial lesions.

Species: Mouse Monoclonal **Cat#:** Z2215 >>>

IHC: Human esophagus with HSV infection stained with 10A3



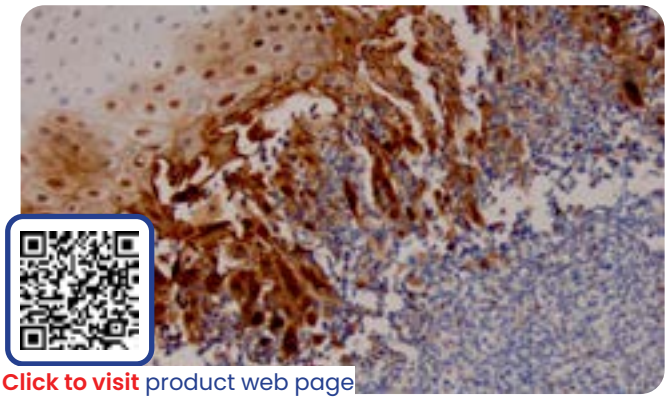
Click to visit product web page

HSV1/2 (clone ZR471 Cocktail)

Recombinant. ZR471 Cocktail recognizes HSV1 and HSV2. There are two main types of Herpes Simplex Virus (HSV), 1 and 2. HSV 1 generally appears in the orofacial organs, whereas HSV 2 usually resides in the sacral ganglion at the base of the spine. The HSV1/2 antibody cocktail reacts with HSV type 1 and type 2 specific antigens common to both types. It is well-suited for detecting HSV in human cellular and tissue materials from superficial lesions.

Species: Rabbit Monoclonal **Cat#:** Z2814 ›››

IHC: Human esophagus with HSV infection stained with ZR471 Cocktail



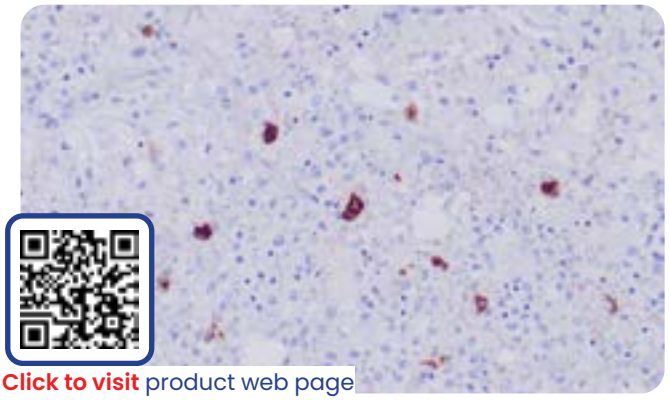
Click to visit product web page

HSV2 (clone 0192)

0192 recognizes HSV2 (Herpes Simplex Virus 2), a double stranded DNA virus that causes painful vesicles or sores and is the most common cause of genital ulcers. The HSV2 antibody reacts with HSV type 2 specific antigens and with antigens common for HSV types 1 and 2. The HSV2 antibody reacts with all the major glycoproteins present in the virus envelope. It is well-suited for detection of HSV2 in human cellular material.

Species: Mouse Monoclonal **Cat#:** Z2831 ›››

IHC: Human lung with HSV infection stained with 0192



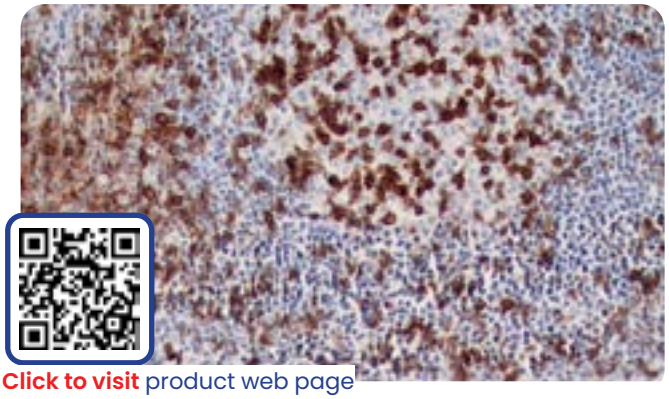
Click to visit product web page

NEW! *ICOS (CD278) (clone ZR476)*

Recombinant. ZR476 recognizes ICOS (Inducible T-cell Co-Stimulator or CD278), a member of the CD28/CTLA-4 superfamily that regulates T-cell activity and immune responses. ICOS is primarily expressed on activated CD4+ and CD8+ T cells where it regulates immune responses and plays a role in the regulation of T-follicular helper cells. It is a sensitive marker for identifying T-cell lymphomas of follicular helper T-cell origin, especially certain peripheral T-cell lymphomas.

Species: Rabbit Monoclonal **Cat#:** Z2846 ›››

IHC: Human tonsil stained with ZR476



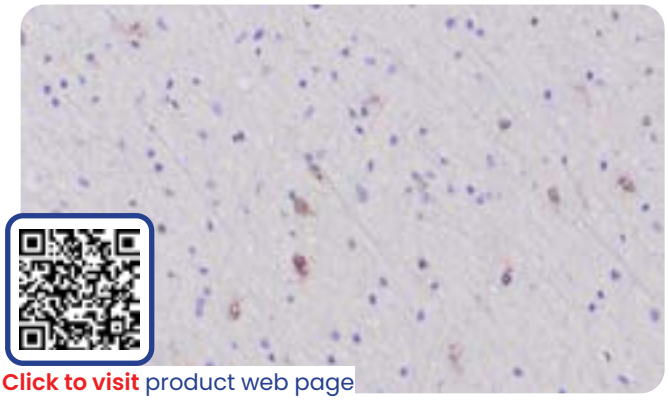
Click to visit product web page

IDH1 (R132H) (clone ZR7)

Recombinant. ZR7 recognizes IDH1 (R132H). This antibody binds specifically to the IDH1 mutated protein but does not bind the wild-type IDH1 protein. IDH1 (R132H) point mutations are frequently seen in grade II and III gliomas, and the IDH1 (R132H) point mutations are balanced in central nervous system tumors. This antibody can be used as a diagnostic marker to help differentiate infiltrating gliomas from gliomas and serves as a prognostic marker.

Species: Rabbit Monoclonal **Cat#:** Z2010 ›››

IHC: Human glioma stained with ZR7



Click to visit product web page

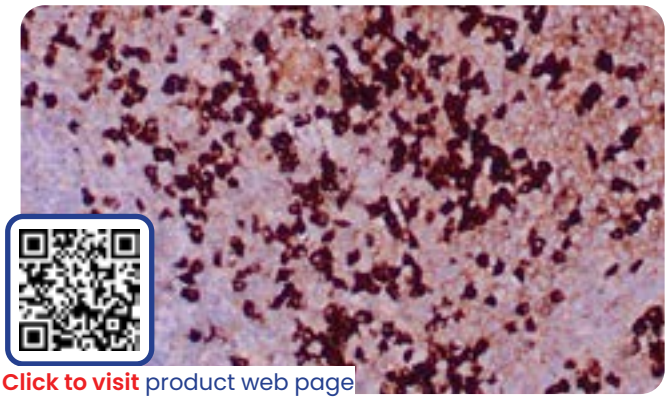
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

IgA (clone ZR291)

Recombinant. ZR291 recognizes IgA, the main protein of the mucosal immune system. IgA is generated by B-cells in gut-associated lymphoid tissue. The most common feature of plasmacytomas, and certain non-Hodgkin's lymphomas is the restricted expression of a single heavy chain class. Demonstration of clonality in lymphoid infiltrates indicates that the infiltrate is clonal and therefore malignant. This antibody reacts with the heavy chain of alpha heavy chain, showing minimal cross-reaction. >>>

Species: Rabbit Monoclonal **Cat#:** Z2729

IHC: Human tonsil stained with ZR291



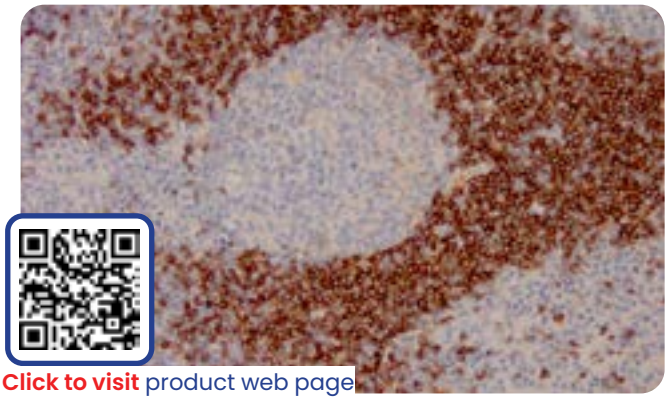
Click to visit product web page

IgD (clone ZR156)

Recombinant. ZR156 recognizes IgD, a transmembrane receptor molecule co-expressed with IgM on mature, naive B cell surfaces, especially in the spleen. It is a four-chain, Y-shaped monomeric structure comprised of two identical heavy chains and two identical light chains. Compared to IgM, IgD exists in lower numbers and lacks expression in immature B cells. This antibody is helpful for identifying leukemia, plasmacytomas, and B-cell lineage lymphomas while highlighting tonsil and nodal architecture during immunohistochemical staining.

Species: Rabbit Monoclonal **Cat#:** Z2696 >>>

IHC: Human lymph node stained with ZR156



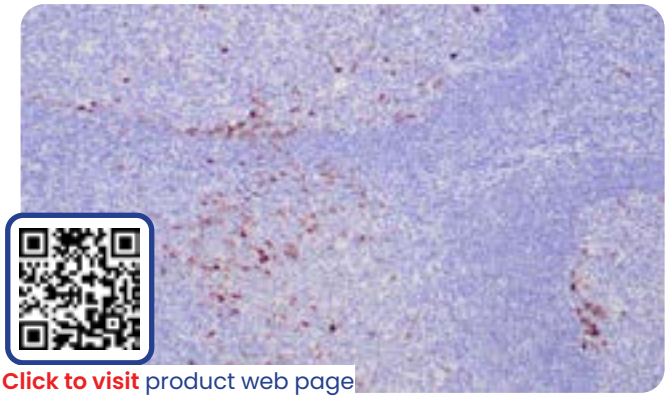
Click to visit product web page

IgG (clone ZR247)

Recombinant. ZR247 recognizes IgG, a protein of 75kDa, identified as a gamma heavy chain of human immunoglobulins. This antibody does not cross-react with alpha, mu, epsilon, or delta heavy chains, T-cells, monocytes, granulocytes, or erythrocytes. This antibody is useful in the identification of leukemias, plasmacytomas, and certain non-Hodgkin's lymphomas. The most common feature of these malignancies is the restricted expression of a single heavy chain class to demonstrate clonality.

Species: Rabbit Monoclonal **Cat#:** Z2722 >>>

IHC: Human tonsil stained with ZR247



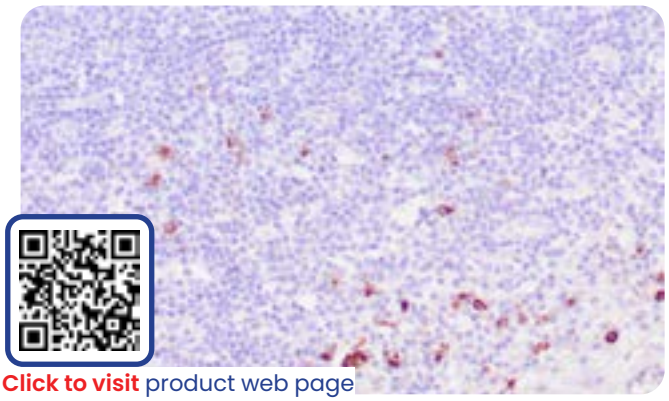
Click to visit product web page

IgG4 (clone ZR299)

Recombinant. ZR299 recognizes IgG4, the least abundant subclass of the constant sequence of immunoglobulins. IgG4-related sclerosing disease has been recognized as a systemic disease characterized by an elevated serum IgG4 level, sclerosing fibrosis, and diffuse lympho-plasmacytic infiltration with the presence of many IgG4-positive plasma cells. IgG4 is overexpressed in inflammatory pseudotumor and underexpressed in inflammatory myofibroblastic tumor. In pulmonary nodular lymphoid hyperplasia, there are an increased number of IgG4-positive cells.

Species: Rabbit Monoclonal **Cat#:** Z2614 >>>

IHC: Human tonsil stained with ZR299



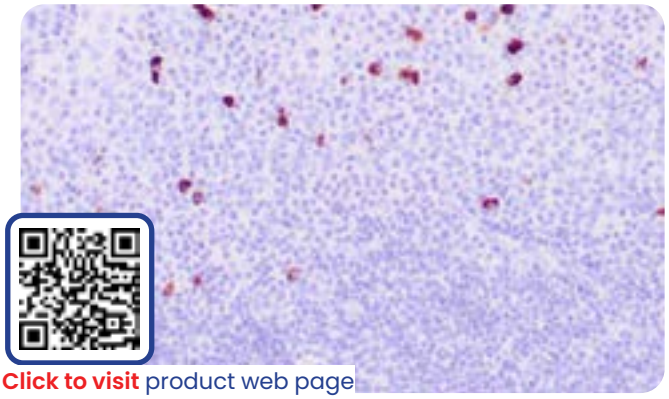
Click to visit product web page

IgG4 (clone ZM56)

Recombinant. ZM56 recognizes IgG4, the least abundant subclass of the constant sequence of immunoglobulins. IgG4-related sclerosing disease has been recognized as a systemic disease characterized by an elevated serum IgG4 level, sclerosing fibrosis, and diffuse lympho-plasmacytic infiltration with the presence of many IgG4-positive plasma cells. IgG4 is overexpressed in inflammatory pseudotumor and underexpressed in inflammatory myofibroblastic tumor. In pulmonary nodular lymphoid hyperplasia, there are an increased number of IgG4-positive cells.

Species: Mouse Monoclonal **Cat#:** Z2366 >>>

IHC: Human salivary gland stained with ZM56



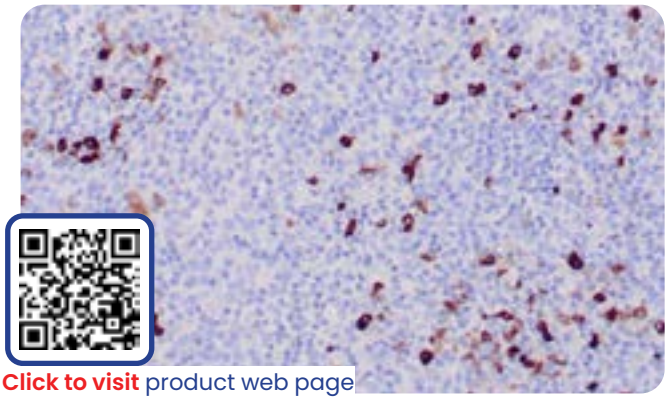
Click to visit product web page

IgM (clone ZR249)

Recombinant. ZR249 recognizes IgM, a protein of 75kDa, identified as a mu heavy chain of human immunoglobulins. This antibody does not cross-react with alpha, gamma, epsilon, or delta heavy chains, T-cells, monocytes, granulocytes, or erythrocytes. Monomeric IgM is expressed as a membrane-bound antibody on the surface of B cells and as a pentamer when secreted by plasma cells. This antibody is useful in identifying leukemias, plasmacytomas, and certain non-Hodgkin's lymphomas to demonstrate cell clonality.

Species: Rabbit Monoclonal **Cat#:** Z2723 >>>

IHC: Human tonsil stained with ZR249



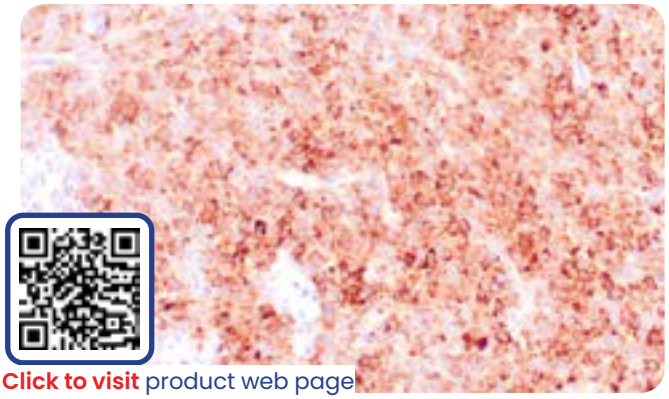
Click to visit product web page

Inhibin-α (clone R1)

R1 recognizes Inhibin alpha, a gonadal protein that preferentially suppresses the secretion of pituitary follicle-stimulating hormone. This antibody binds a 47kDa protein, which is identified as alpha subunit of inhibin. Inhibin-alpha antibodies are useful in making a differential diagnosis between adrenal cortical tumors and renal cell carcinoma. The Inhibin-alpha antibody is also used to make the differential diagnosis of intra-uterine versus ectopic pregnancy in endometrial curetting panels.

Species: Mouse Monoclonal **Cat#:** Z2115 >>>

IHC: Human granulosa cell tumor stained with R1



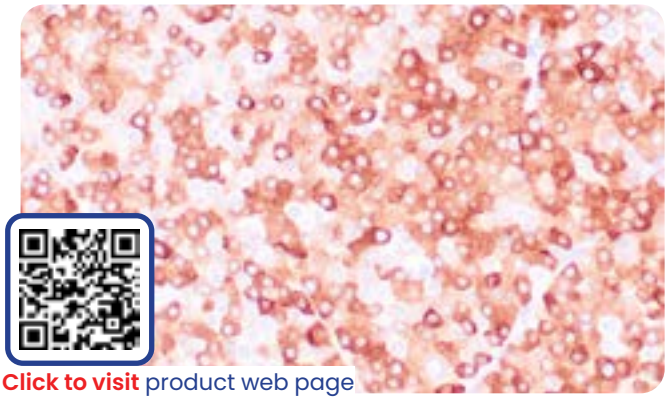
Click to visit product web page

Inhibin-α (clone ZM113)

Recombinant. ZM113 recognizes Inhibin alpha, a gonadal protein that preferentially suppresses the secretion of pituitary follicle-stimulating hormone. This antibody binds a 47kDa protein, which is identified as alpha subunit of inhibin. Inhibin-alpha antibodies are useful in making a differential diagnosis between adrenal cortical tumors and renal cell carcinoma. The Inhibin-alpha antibody is also used to make the differential diagnosis of intrauterine versus ectopic pregnancy in endometrial curetting panels.

Species: Mouse Monoclonal **Cat#:** Z2413 >>>

IHC: Human adrenal cortical tumor stained with ZM113



Click to visit product web page

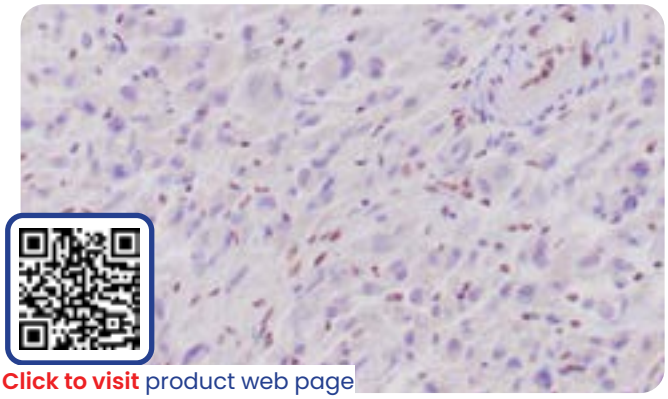
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

INI-1 (clone 25)

25 recognizes INI-1, a core subunit of the adenosine triphosphate dependent SWI and SNF chromatin remodeling complex. The INI-1 gene has been found to be a tumor suppressor, which is often mutated or deleted in malignant rhabdoid tumors, epithelioid sarcoma, and some malignant peripheral nerve sheath tumors. The INI-1 protein is a tumor suppressor where loss of function is associated with rhabdoid tumor predisposition syndrome 1 and familial schwannomatosis.

Species: Mouse Monoclonal **Cat#:** Z2177 ›››

IHC: Human epithelioid sarcoma stained with 25



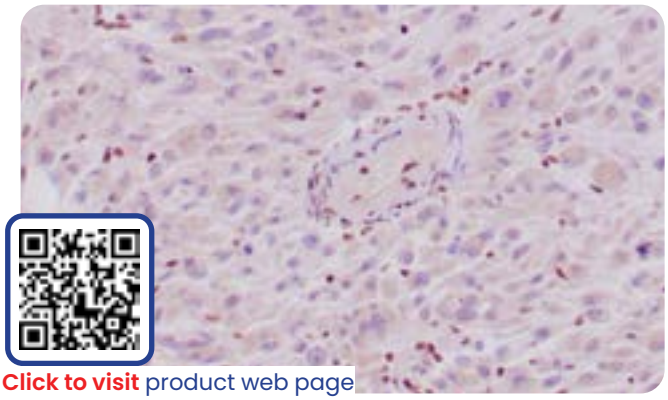
Click to visit product web page

INI-1 (clone ZR282)

Recombinant. ZR282 recognizes INI-1, a core subunit of the adenosine triphosphate dependent SWI and SNF chromatin remodeling complex. The INI-1 gene has been found to be a tumor suppressor, which is often mutated or deleted in malignant rhabdoid tumors, epithelioid sarcoma, and some malignant peripheral nerve sheath tumors. The INI-1 protein is a tumor suppressor where loss of function is associated with rhabdoid tumor predisposition syndrome 1 and familial schwannomatosis.

Species: Rabbit Monoclonal **Cat#:** Z2597 ›››

IHC: Human epithelioid sarcoma stained with ZR282



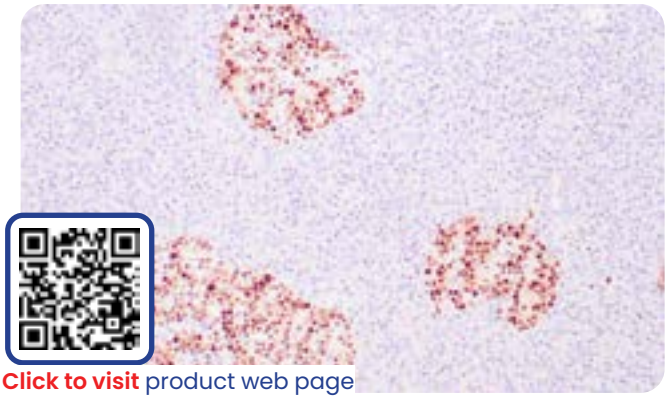
Click to visit product web page

INSM1 (clone A8)

Recombinant. A8 recognizes INSM1 (insulinoma-associated protein 1), a developmentally regulated zinc-finger transcription factor. INSM1 localizes in the nucleus and is expressed in embryonic tissues undergoing neuroendocrine differentiation. It is not expressed in normal adult tissues but can be found highly expressed in neuroendocrine tumors. INSM1 is positive in 95% of lung small cell carcinoma and 91% of lung large cell neuroendocrine carcinoma. Therefore, INSM1 is sensitive and specific as a first-line pan-neuroendocrine marker.

Species: Mouse Monoclonal **Cat#:** Z2330 ›››

IHC: Human pancreas stained with A8



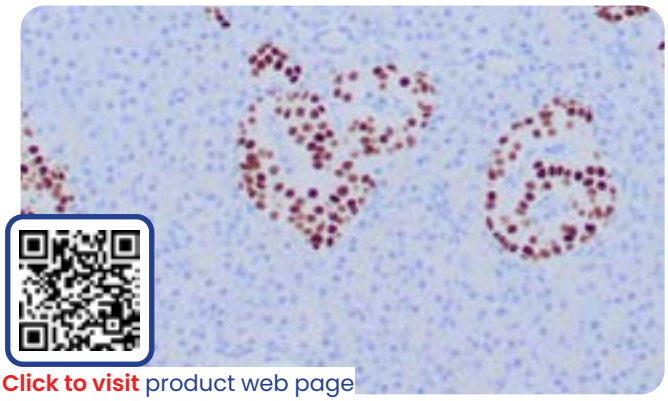
Click to visit product web page

INSM1 (clone ZR395)

Recombinant. ZR395 recognizes INSM1 (insulinoma-associated protein 1), a developmentally regulated zinc-finger transcription factor. INSM1 localizes in the nucleus and is expressed in embryonic tissues undergoing neuroendocrine differentiation. It is not expressed in normal adult tissues but can be found highly expressed in neuroendocrine tumors. INSM1 is positive in 95% of lung small cell carcinoma and 91% of lung large cell neuroendocrine carcinoma. Therefore, INSM1 is sensitive and specific as a first-line pan-neuroendocrine marker.

Species: Rabbit Monoclonal **Cat#:** Z2751 ›››

IHC: Human pancreas stained with ZR395



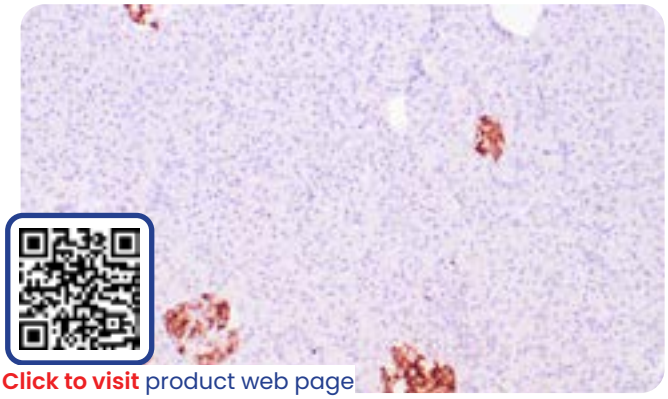
Click to visit product web page

Insulin Cocktail *(clone ZM83a & ZM83b)*

Recombinant. ZM83a & ZM83b recognizes insulin, an important marker for beta cell and insulinoma. Proinsulin, which has very little biological activity, is cleaved by proteases within to yield the active insulin molecule and the C-terminal basic residue. Insulin enhances membrane transport of glucose, amino acids, and certain ions. Deficiency of insulin results in diabetes mellitus. The cocktail of insulin antibodies are important as beta-cell and insulinoma markers.

Species: Mouse Monoclonal **Cat#:** Z2525 ›››

IHC: Human pancreas stained with ZM83a & ZM83b



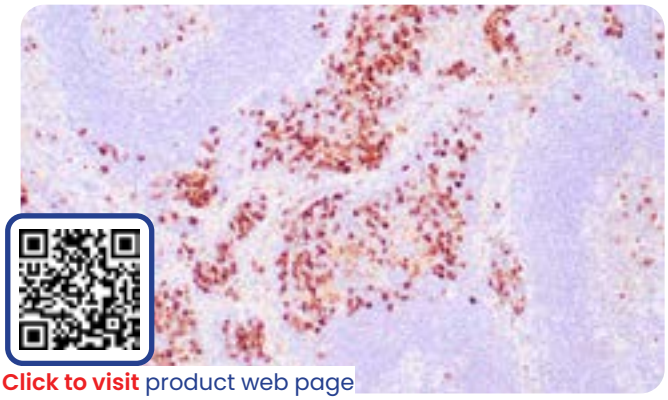
Click to visit product web page

Kappa light chain *(clone ZM81)*

Recombinant. ZM81 recognizes Kappa, specifically kappa light chain of immunoglobulins, and shows no cross-reaction with lambda light chain or any of the five heavy chains. The Kappa antibody recognizes human Ig kappa light chains of both secreted and cell surface immunoglobulin. This antibody is useful in the identification of leukemias, plasmacytomas, and certain non-Hodgkin's lymphomas. Demonstration of clonality in lymphoid infiltrates indicates that the infiltrate is clonal and therefore malignant.

Species: Mouse Monoclonal **Cat#:** Z2532 ›››

IHC: Human tonsil stained with ZM81



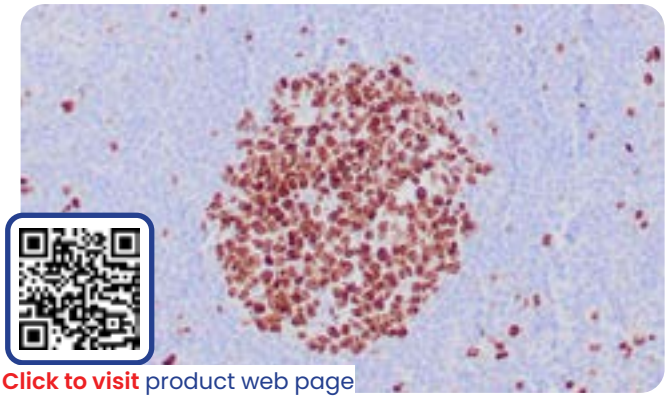
Click to visit product web page

Ki-67 *(clone ZR433)*

Recombinant. ZR433 recognizes Ki-67, a nuclear, non-histone protein that is present in all stages of the cell cycle except G0. This characteristic makes Ki-67 an excellent marker for proliferating cells and is commonly used as one of the prognostic factors in cancer studies. Ki-67 labeling index has been shown to be a prognostic marker in a number of neoplasms including grade II astrocytomas, oligodendroglioma, colon carcinoma, and breast carcinoma. In general, Ki-67 is a good marker of proliferating cell populations.

Species: Rabbit Monoclonal **Cat#:** Z2789 ›››

IHC: Human tonsil stained with ZR433



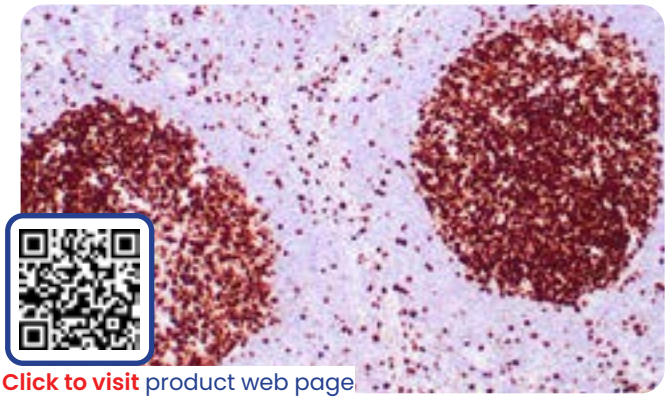
Click to visit product web page

Ki-67 *(clone ZM67)*

Recombinant. ZM67 recognizes Ki-67, a nuclear, non-histone protein that is present in all stages of the cell cycle except G0. This characteristic makes Ki-67 an excellent marker for proliferating cells and is commonly used as one of the prognostic factors in cancer studies. Ki-67 labeling index has been shown to be a prognostic marker in a number of neoplasms including grade II astrocytomas, oligodendroglioma, colon carcinoma, and breast carcinoma. In general, Ki-67 is a good marker of proliferating cell populations.

Species: Mouse Monoclonal **Cat#:** Z2377 ›››

IHC: Human lymph node stained with ZM67



Click to visit product web page

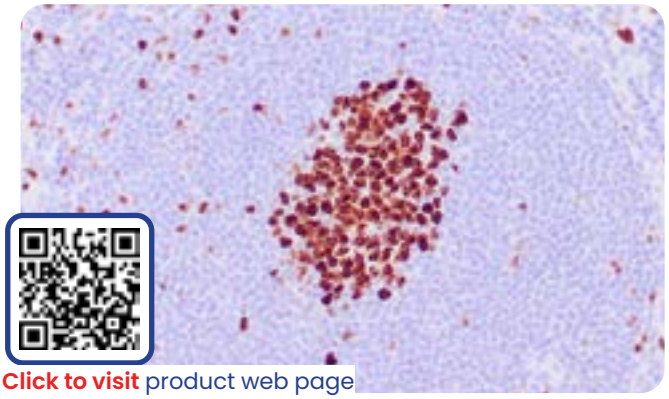
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

Ki-67 (clone MIB-1)

MIB-1 recognizes Ki-67, a nuclear, non-histone protein that is present in all stages of the cell cycle except G0. This characteristic makes Ki-67 an excellent marker for proliferating cells and is commonly used as one of the prognostic factors in cancer studies. Ki-67 labeling index has been shown to be a prognostic marker in a number of neoplasms including grade II astrocytomas, oligodendroglioma, colon carcinoma, and breast carcinoma.

Species: Mouse Monoclonal **Cat#:** Z2305 ›››

IHC: Human tonsil stained with MIB-1



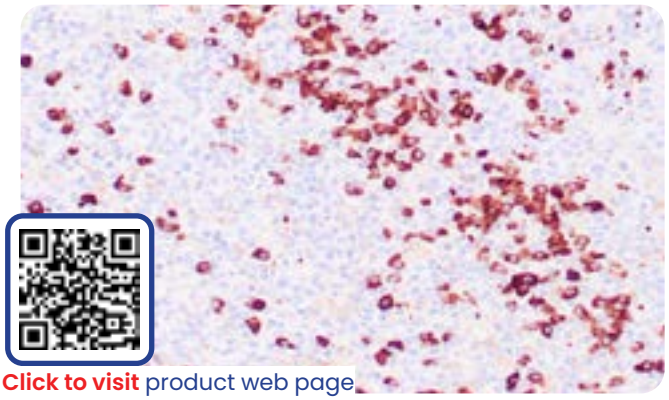
Click to visit product web page

Lambda (clone LcN-2)

LcN-2 recognizes Lambda, and is specific to lambda light chain of immunoglobulins and shows no cross-reaction with kappa light chain or any of the five heavy chains. In mammals, the ratio of Kappa to Lambda is 70:30. However, with the occurrence of multiple myeloma or other B-cell malignancies this ratio is disturbed. The Lambda antibody (is the lambda light chain) is useful in the identification of leukemias, plasmacytomas, and certain non-Hodgkin's lymphomas.

Species: Mouse Monoclonal **Cat#:** Z2457 ›››

IHC: Human tonsil stained with LcN-2



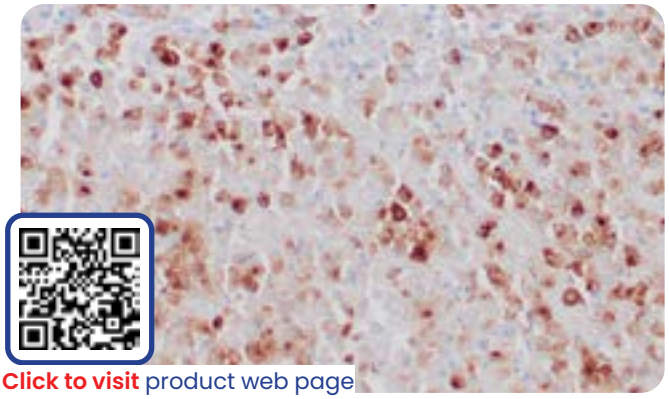
Click to visit product web page

Langerin (clone ZR170)

Recombinant. ZR170 recognizes Langerin (CD207), a Ca^{2+}-dependent, C-type lectin domain-containing type II transmembrane protein that induces epidermal LC to differentiate into Birbeck granules (BG). Langerin is a highly selective marker for Langerhans cells and the rare cells of Langerhans cell histiocytosis. Immunohistochemical evaluation of Langerin expression may have utility in substantiating a diagnosis of Langerhans cell histiocytosis and expanding this disorder from other non-Langerhans cell histiocytic proliferations. Langerin protein expression has utility in differentiating Langerhans cell histiocytosis.

Species: Rabbit Monoclonal **Cat#:** Z2700 ›››

IHC: Human Langerhans cell histiocytosis stained with ZR170



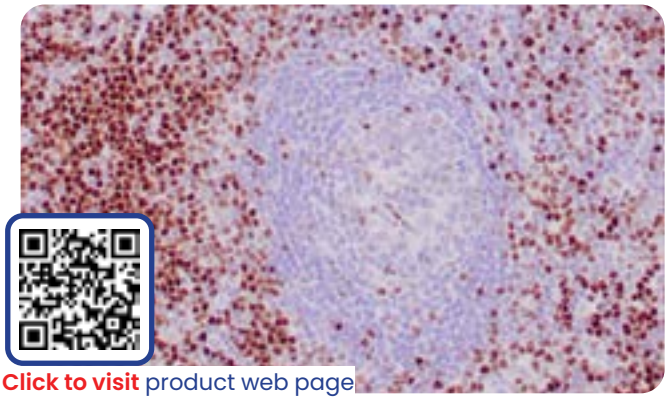
Click to visit product web page

LEF1 (clone ZR336)

Recombinant. ZR336 recognizes LEF1 (Lymphoid Enhancer Binding Factor 1), a transcription factor that participates as a regulator in Wnt signaling pathways. LEF1 belongs to the TCF/LEF family. LEF1 is an important factor in lymphopoiesis and is expressed normally in T and pro-B cells but not expressed in mature B cells. Strong nuclear expression of LEF1 has been observed in majority of chronic lymphocytic leukemia/small lymphocytic lymphoma cases and LEF1 is not detected in other small B-cell lymphomas.

Species: Rabbit Monoclonal **Cat#:** Z2642 ›››

IHC: Human tonsil stained with ZR336



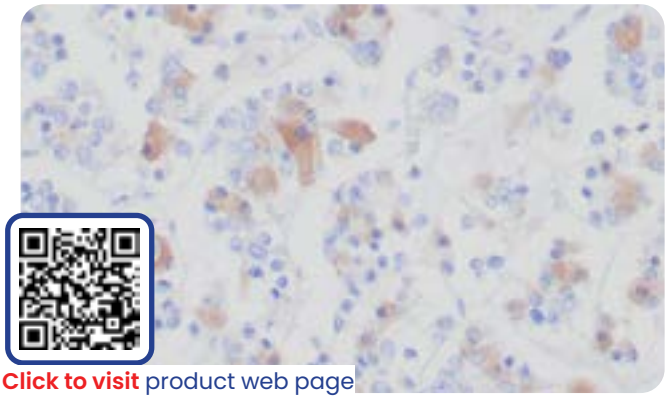
Click to visit product web page

LH *(clone ZR173)*

Recombinant. ZR173 recognizes LH (Luteinizing Hormone), a glycoprotein hormone with two subunits (alpha and beta) that confers its specific biologic action and is responsible for interaction with the LH receptor. LH is synthesized and secreted by gonadotrophs in the anterior lobe of the pituitary gland, in concert with the other pituitary gonadotropin follicle-stimulating hormone (FSH). LH antibody is a useful marker in the classification of pituitary tumors and the study of pituitary disease.

Species: Rabbit Monoclonal **Cat#:** Z2701 ›››

IHC: Human pituitary stained with ZR173



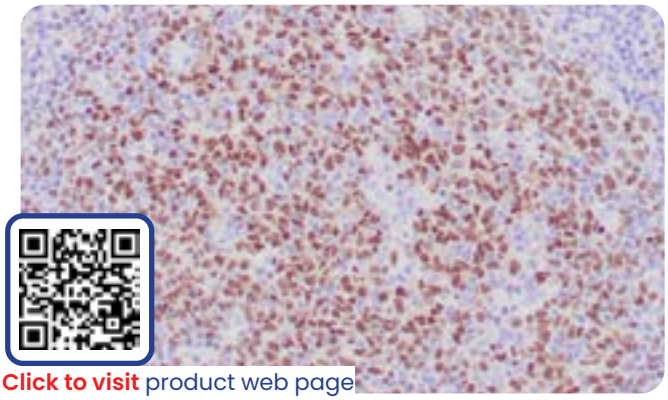
Click to visit product web page

LMO-2 *(clone ZR87)*

Recombinant. ZR87 recognizes LMO-2 (LIM-Domain Only 2) protein, a protein RNP complex member and crucial link in hematopoietic development and is highly conserved and where inappropriate overexpression of T cells contributes to T-cell leukemia. Additionally, LMO-2 has a particular function in normal and neoplastic endothelial cells involving the regulation of angiogenesis and lymph-angiogenesis. Immunohistochemical studies have demonstrated the expression of LMO-2 in both normal germinal center B cells and germinal center-derived B-cell lymphomas.

Species: Rabbit Monoclonal **Cat#:** Z2397 ›››

IHC: Human lymph node stained with ZR87



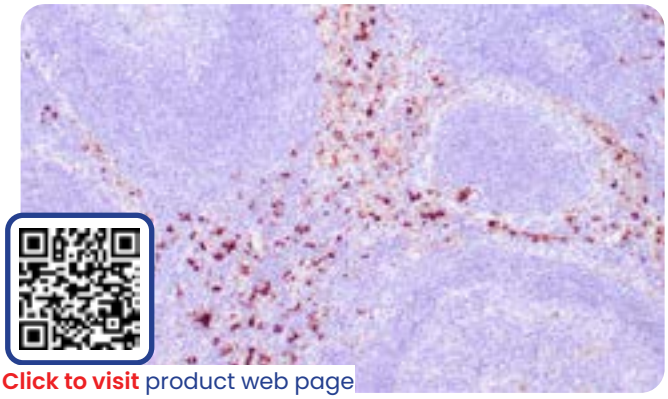
Click to visit product web page

Lysozyme *(clone ZM120)*

Recombinant. ZM120 recognizes Lysozyme, a glycosidic hydrolase that acts as an antibacterial agent. Lysozyme is synthesized predominantly in reactive histiocytes rather than in resting, unstimulated phagocytes. This Lysozyme antibody labels myeloid cells, histiocytes, granulocytes, macrophages, and monocytes. The Lysozyme antibody is helpful in the identification of myeloid or monocytic nature of acute leukemia. This enzyme breaks the (1-4) glycosidic linkages between N-acetylmuramic acid and N-acetylglucosamine.

Species: Mouse Monoclonal **Cat#:** Z2425 ›››

IHC: Human lymph node stained with ZM120



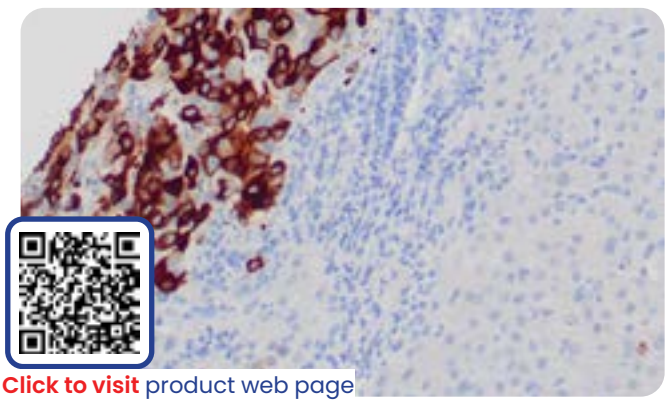
Click to visit product web page

Mammaglobin *(clone ZR363)*

Recombinant. ZR363 recognizes mammaglobin, a cytoplasmic protein which is a mammary-specific member of the uteroglobin family. Mammaglobin is a sensitive and very specific marker for breast carcinoma. By paraffin immunohistochemistry, the overall sensitivity of mammaglobin for breast carcinoma was reported to be about 80%. When combined with other breast-restricted markers such as GCDFP-15, an overall sensitivity of 84% could be achieved. Mammaglobin can play a contributing role in the identification of primary sites of carcinomas presenting as metastasis.

Species: Rabbit Monoclonal **Cat#:** Z2739 ›››

IHC: Human liver metastatic breast carcinoma stained with ZR363



Click to visit product web page

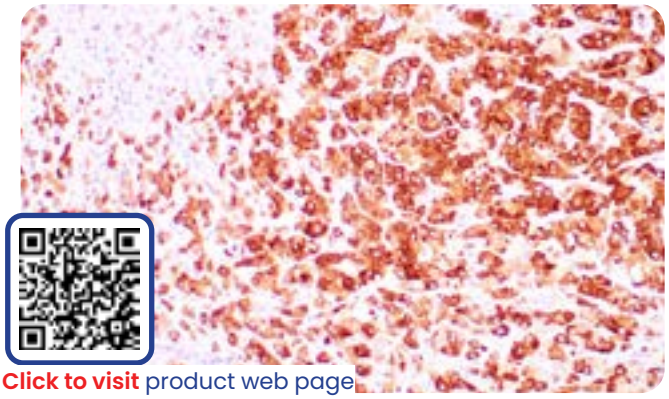
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

Mammaglobin *(clone 31-A5)*

Recombinant. 31-A5 recognizes mammaglobin, a cytoplasmic protein which is a mammary-specific member of the uteroglobin family. Mammaglobin is a sensitive and very specific marker for breast carcinoma. By paraffin immunohistochemistry, the overall sensitivity of mammaglobin for breast carcinoma was reported to b about 80%. When combined with other breast-restricted markers such as GCDFP-15, an overall sensitivity of 84% could be achieved. Mammaglobin can play a contributing role in the identification of primary sites of carcinomas.

Species: Rabbit Monoclonal **Cat#:** Z2009 ›››

IHC: Human breast carcinoma stained with 31-A5



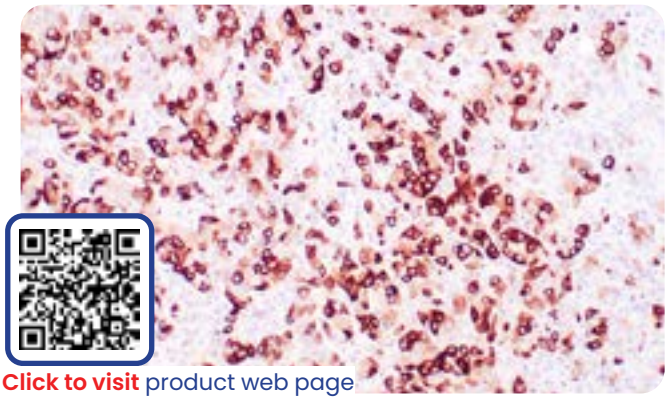
Click to visit product web page

Mammaglobin *(clone 304-1A5)*

Recombinant. 304-1A5 recognizes Mammaglobin, a cytoplasmic protein which is a mammary-specific member of the uteroglobin family. Mammaglobin is a sensitive and very specific marker for breast carcinoma. By paraffin immunohistochemistry, the overall sensitivity of mammaglobin for breast carcinoma was reported to be about 80%. When combined with other breast-restricted markers such as GCDFP-15, an overall sensitivity of 84% could be achieved. Mammaglobin can play a contributing role in the identification of primary sites of carcinomas.

Species: Mouse Monoclonal **Cat#:** Z2007›››

IHC: Human breast carcinoma stained with 304-1A5



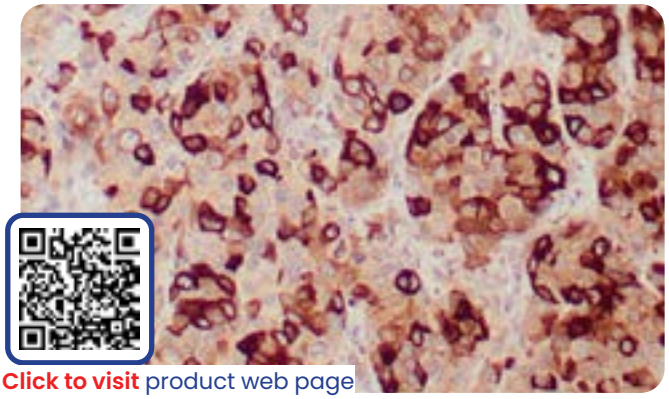
Click to visit product web page

Mammaglobin Cocktail *(clone 304-1A5+31-A5)*

Recombinant. 304-1A5+31-A5 recognizes Mammaglobin and combined as a cocktail to detect the mammaglobin antigen in ductal and lobular epithelial cells. In normal breast tissue, 304-1A5 and 31-A5 labels breast ductal and lobular epithelial cells. Mammaglobin is a broad-associated glycoprotein distantly related to secretoglobin family family that includes human uteroglobin and lipophilin. Mammaglobin can play a contributing role in the identification of primary sites of carcinoma presenting as metastatic tumor.

Species: Rabbit & Mouse Monoclonal **Cat#:** Z2011›››

IHC: Human breast carcinoma stained with 304-1A5+31-A5



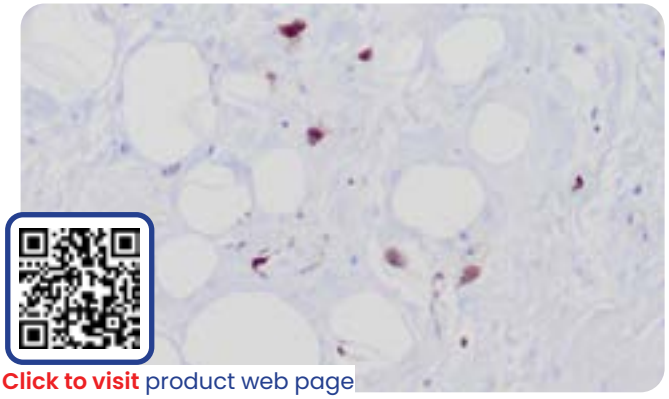
Click to visit product web page

MDM2 *(clone ZR258)*

Recombinant. ZR258 recognizes MDM2 (Mouse Double Minute 2), a nuclear phosphoprotein that binds and inhibits transactivation by tumor protein p53. MDM2 inhibits p53 by blocking transactivation domain, targeting p53 for ubiquitination and exporting to cytoplasm. MDM2 can promote tumor formation by targeting tumor suppressor proteins for proteasomal degradation and also affects the cell cycle, apoptosis, and tumorigenesis. MDM2 overexpression is common in atypical lipomatous tumor and well-differentiated liposarcoma and dedifferentiated liposarcoma.

Species: Rabbit Monoclonal **Cat#:** Z2572 ›››

IHC: Human atypical lipomatous tumor stained with ZR258



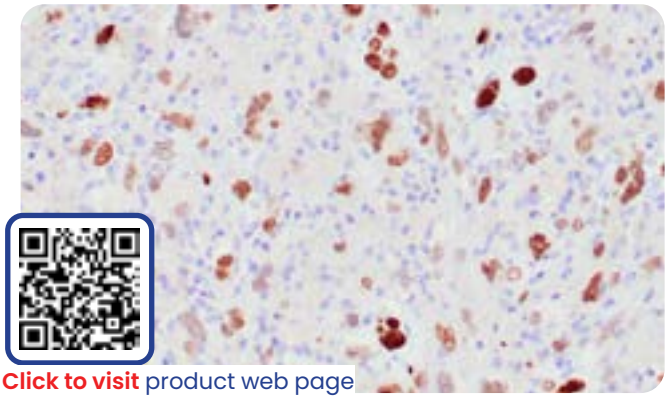
Click to visit product web page

MDM2 *(clone SMP14)*

SMP14 recognizes MDM2 (Mouse Double Minute 2), a nuclear phosphoprotein that binds and inhibits transactivation by tumor protein p53. MDM2 inhibits p53 by blocking transactivation domain domain, targeting p53 for ubiquitination and exporting to cytoplasm. MDM2 can promote tumor formation by targeting tumor suppressor proteins for professional degradation and also affects the cell cycle, apoptosis, and tumorigenesis. MDM2 overexpression is common in atypical lipomatous tumor and well-differentiated liposarcoma and dedifferentiated liposarcoma.

Species: Mouse Monoclonal **Cat#:** Z2189 ›››

IHC: Human atypical lipomatous tumor stained with SMP14



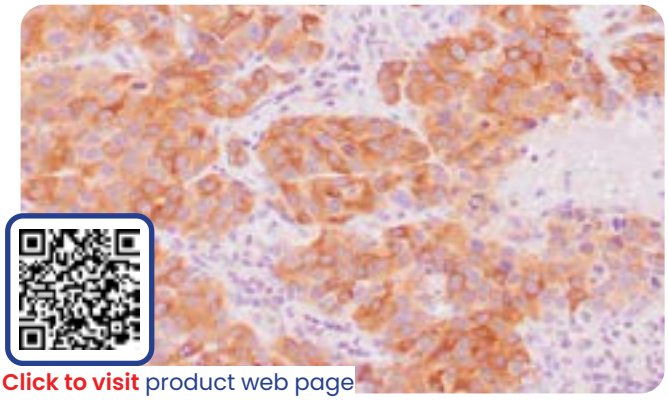
Click to visit product web page

Melan-A/MART-1 *(clone A103)*

A103 recognizes Melan-A (MART-1; MART-1 Melanoma Antigen Recognized by T cells 1). Melan-A/MART-1 is a newly identified melanocyte differentiation antigen recognized by autologous cytotoxic T lymphocytes. Melan-A/MART-1 is present in melanosomes and endoplasmic reticulum. Melan-A (MART-1) Clone A103 highlights melanoma and other tumors showing melanocytic differentiation. This antibody to Melan-A (MART-1) does not stain carcinomas of epithelial, lymphoid, glial, or mesenchymal origin.

Species: Mouse Monoclonal **Cat#:** Z2052 ›››

IHC: Human melanoma stained with A103



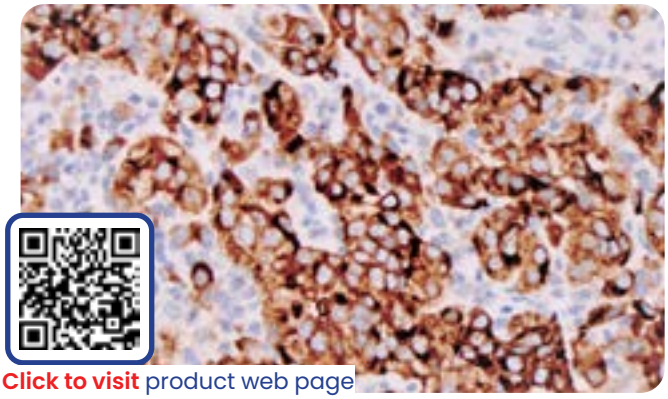
Click to visit product web page

Melanosome *(clone HMB-45)*

HMB-45 recognizes Melanosome, an organelle found in animal cells and is the site for synthesis, storage and transport of melanin. The HMB-45 antibody labels the melanosome protein in the cytoplasm of melanocytes in both normal and neoplastic cells. It is a useful tool for classifying melanomas and melanocytic lesions. By immunohistochemistry, Melanosome antibody (clone HMB-45) specifically recognizes a protein in melanocytes and melanomas, but does not stain carcinomas.

Species: Mouse Monoclonal **Cat#:** Z2088 ›››

IHC: Human melanoma stained with HMB-45



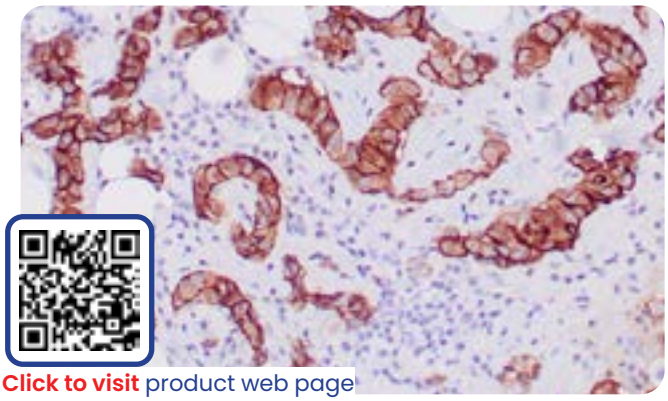
Click to visit product web page

Mesothelin *(clone ZM25)*

ZM25 recognizes Mesothelin, a 40kDa glycosyl-phosphatidylinositol-anchored glycoprotein cleaved from a 69kDa precursor protein. Mesothelin immunoreactivity is high in cancers of the ovary (serous papillary, endometrioid and undifferentiated) and pancreas, with less frequent staining seen in adenocarcinomas of the endometrium, lung and stomach/esophagus. Mesothelin is one of the most sensitive markers for mesotheliomas. It shows restricted expression in normal tissues like mesothelial cells lining the pleura, peritoneum, and pericardium.

Species: Mouse Monoclonal **Cat#:** Z2353 ›››

IHC: Human mesothelioma stained with ZM25



Click to visit product web page

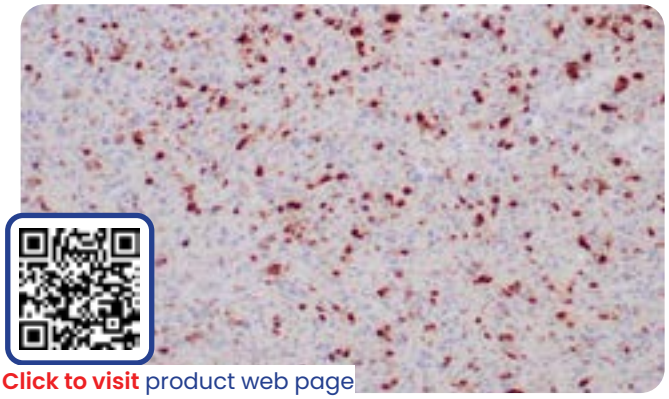
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

MGMT *(clone ZR434)*

Recombinant. ZR434 recognizes MGMT (O-6-methylguanine-DNA methyltransferase), an important suppressor of mutation and carcinogenesis. Cancer chemotherapeutic alkylating agents (such as BCNU) act by inducing formation of lethal cross-links at the O6-alkylguanine position in DNA. MGMT transfers alkyl adducts from the O6-position of guanine in DNA (alkylation damage repair) to a cysteine residue in its own sequence, thereby restoring DNA to its intact state. MGMT immunoreactivity was associated with different grades and subtypes of gliomas.

Species: Rabbit Monoclonal **Cat#:** Z2790 ›››

IHC: Human colon carcinoma stained with ZR434



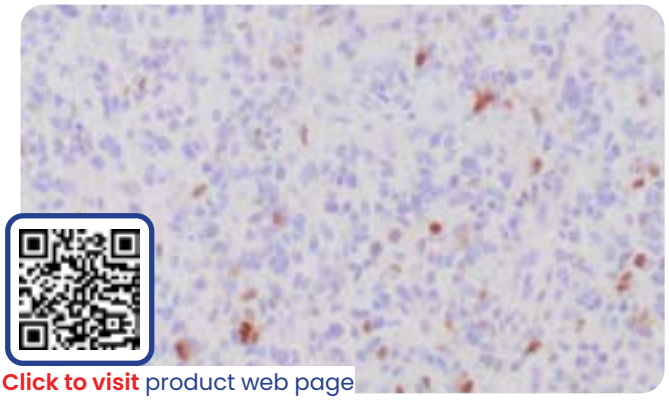
Click to visit product web page

MGMT *(clone ZM314)*

Recombinant. ZM314 recognizes MGMT, a DNA repair protein that reverses DNA damage induced by alkylating agents and acts as a suppressor of mutation and carcinogenesis. Methylation of promoter sequence of the MGMT gene silences the MGMT, making tumor cells more sensitive to treatment with chemotherapeutic alkylating agents, which act by inducing formation of lethal cross-links at the O6-alkylguanine position in DNA. MGMT transfers alkyl adducts from O6 position of guanine in DNA.

Species: Mouse Monoclonal **Cat#:** Z2618 ›››

IHC: Human glioma stained with ZM314



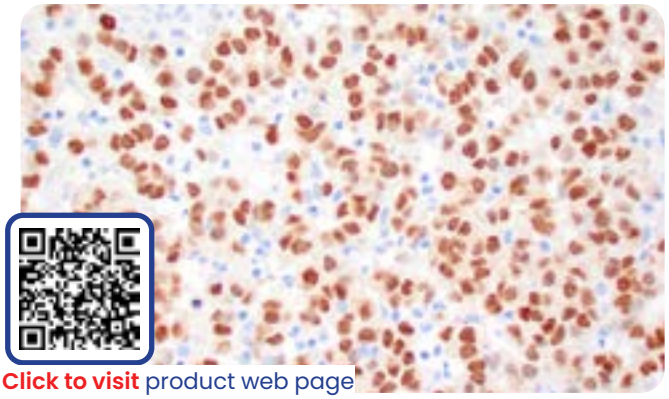
Click to visit product web page

MiTF/Microphthalmia *(clone C5/D5)*

C5/D5 recognizes MITF (Microphthalmia), a basic helix-loop-helix-leucine zipper (bHLH-Zip) transcription factor implicated in pigmentation, mast cells and bone development. The mutation of the MITF gene causes Waardenburg syndrome type II in humans, in mice, a profound loss of pigmented cells in the skin, eye and inner ear results, as well as osteopetrosis and defects in natural killer and mast cells. Clone C5 & D5 cocktail is especially designed for sensitive detection of MITF protein.

Species: Mouse Monoclonal **Cat#:** Z2161 ›››

IHC: Human melanoma stained with C5/D5



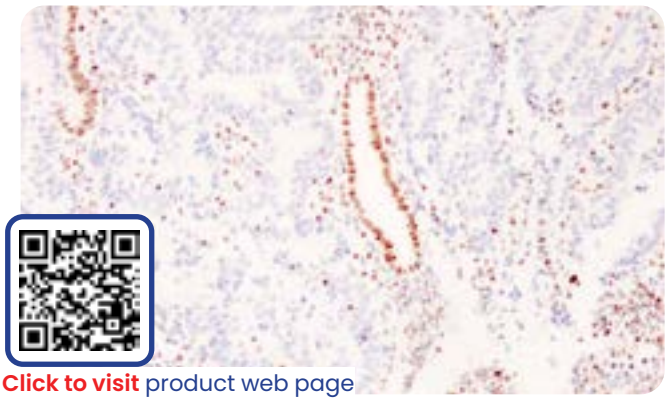
Click to visit product web page

MLH-1 *(clone G168-728)*

G168-728 recognizes MLH-1, a gene where defects cause hereditary non-polyposis colorectal cancer type 2 (HNPCC2). MLH-1 is a protein of 85kDa that heterodimerizes with PMS2 to form MutL alpha, a component of the post-replication DNA mismatch repair system. Repair is initiated by MutS alpha binding to a DNA mismatch, then MutL alpha is recruited to the heteroduplex. MLH-1 is implicated in DNA damage signaling, a process which induces cell cycle arrest and can lead to apoptosis.

Species: Mouse Monoclonal **Cat#:** Z2076 ›››

IHC: Human colon adenocarcinoma with Lynch syndrome stained with G168-728



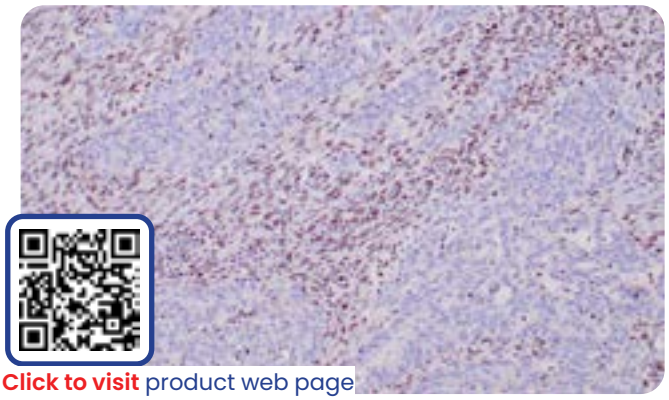
Click to visit product web page

MLH-1 *(clone ZR347)*

Recombinant. ZR347 recognizes MLH-1, a gene where defects cause hereditary non-polyposis colorectal cancer type 2 (HNPCC2). MLH-1 is a protein of 85kDa that heterodimerizes with PMS2 to form MutL alpha, a component of the post-replication DNA mismatch repair system. Repair is initiated by MutS alpha binding to a DNA mismatch, then MutL alpha is recruited to the heteroduplex. MLH-1 is implicated in DNA damage signaling, a process which induces cell cycle arrest and can lead to apoptosis.

Species: Rabbit Monoclonal **Cat#:** Z2656 ›››

IHC: Human colon adenocarcinoma with Lynch syndrome stained with ZR347



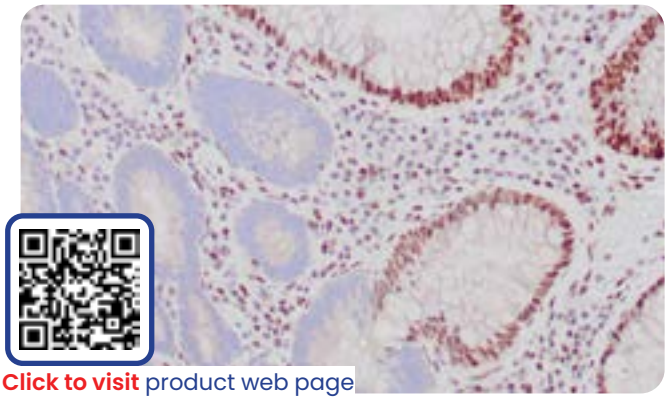
Click to visit product web page

MSH-2 *(clone ZR260)*

Recombinant. ZR260 recognizes MSH-2, one of the four main genes of the Mismatch Repair family (MMR), where an optimally functioning MMR is important for cancer avoidance and to maintain genomic stability by correcting single base mismatch and insertion deletion loops which results from DNA replication genetic recombination or chemical damage. Inherited mutations in the MSH-2 gene are involved in familial cancer syndromes including Lynch and Muir-Torre syndromes, causing microsatellite instability.

Species: Rabbit Monoclonal **Cat#:** Z2574 ›››

IHC: Human colon adenocarcinoma stained with ZR260



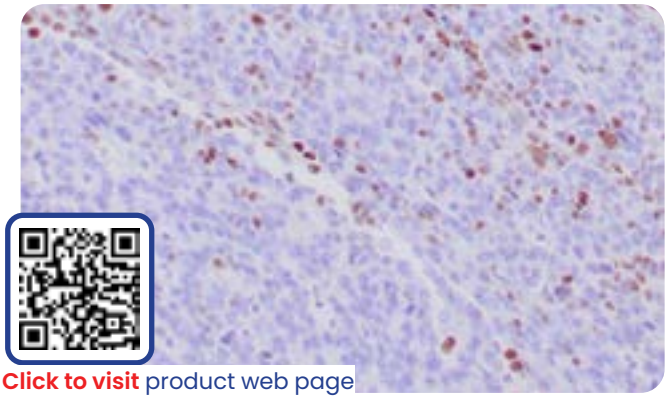
Click to visit product web page

MSH-6 *(clone ZR342)*

Recombinant. ZR342 recognizes MSH-6, a mismatch repair protein that has been shown to be defective in hereditary non-polyposis colorectal cancer (HNPCC). Additionally, mutations in MSH-6 are associated with increased risk of colorectal cancer, Lynch syndrome and endometrial cancer, leading to microsatellite instability. Mismatch repair (MMR) proteins are essential for repairing DNA errors that are generated during DNA replication. There are at least seven MMR proteins in humans, of which four have clinical relevance.

Species: Rabbit Monoclonal **Cat#:** Z2540 ›››

IHC: Human colon carcinoma (Lynch) stained with ZR342



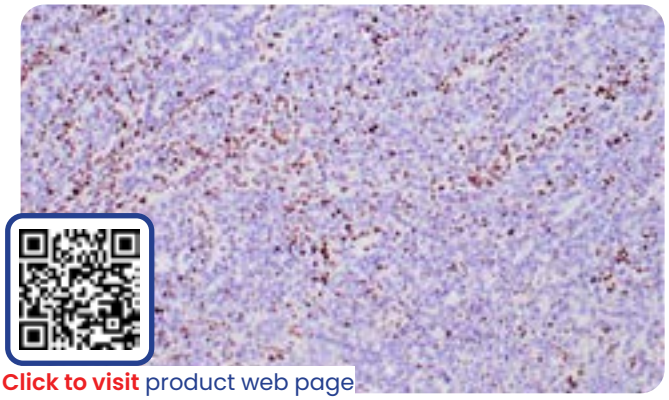
Click to visit product web page

MSH-6 *(clone ZM99)*

Recombinant. ZM99 recognizes MSH-6, a mismatch repair protein that has been shown to be defective in hereditary non-polyposis colorectal cancer (HNPCC). Additionally, mutations in MSH-6 are associated with increased risk of colorectal cancer, Lynch syndrome and endometrial cancer, leading to microsatellite instability. Mismatch repair (MMR) proteins are essential for repairing DNA errors that are generated during DNA replication. There are at least seven MMR proteins in humans, of which four have clinical relevance.

Species: Mouse Monoclonal **Cat#:** Z2409 ›››

IHC: Human colon adenocarcinoma with Lynch syndrome stained with ZM99



Click to visit product web page

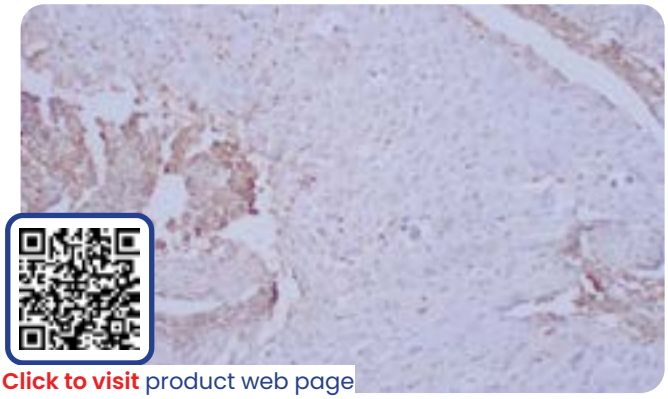
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

MTAP *(clone ZR467)*

Recombinant. ZR467 recognizes MTAP (Methylthioadenosine phosphorylase), a ubiquitously expressed housekeeping enzyme involved in salvage of adenine and methionine. In humans, the gene encoding MTAP is located on chromosome 9p21, a region that is a tumor suppressor gene. Inactivation of the tumor suppressor gene is one of the most frequent genetic alterations in human cancer, occurring through homozygous deletion, point mutation, or epigenetic silencing. Loss of MTAP expression serves as a surrogate marker.

Species: Rabbit Monoclonal **Cat#:** Z2827 ›››

IHC: Human urothelial carcinoma stained with ZR467



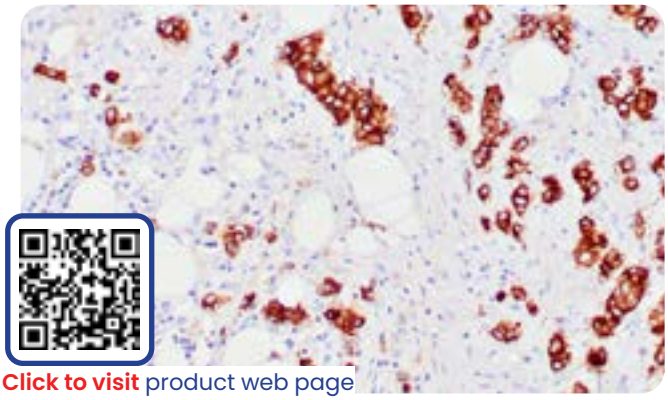
Click to visit product web page

MUC-1 *(clone ZM32)*

Recombinant. ZM32 recognizes MUC-1, a large cell surface mucin glycoprotein expressed by most glandular and ductal epithelial cells and some hematopoietic cell lineages. MUC-1 is expressed on the most secretory epithelia, including the mammary gland and some hematopoietic cells. It is expressed abundantly in lactating mammary glands and over-expressed abundantly in >90% of breast carcinomas and metastatic tumors. Transgenic MUC-1 has been shown to associate with all four c-erbB receptors and localizes with erbB1 (EGFR).

Species: Mouse Monoclonal **Cat#:** Z2336 ›››

IHC: Human cholangiocarcinoma stained with ZM32



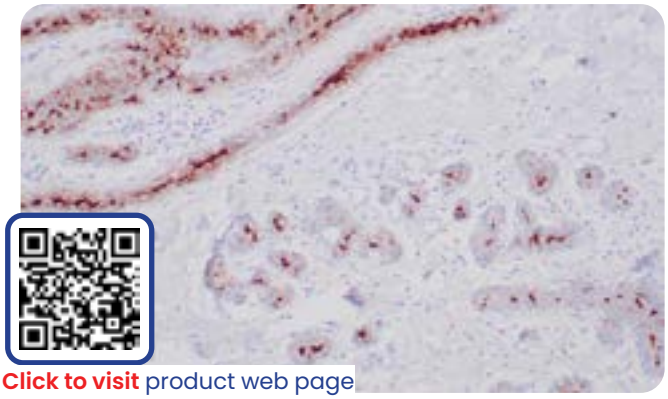
Click to visit product web page

MUC-1 *(clone ZR435)*

Recombinant. ZR435 recognizes MUC-1, a large cell surface mucin glycoprotein expressed by most glandular and ductal epithelial cells and some hematopoietic cell lineages. MUC-1 is expressed on the most secretory epithelia, including the mammary gland and some hematopoietic cells. It is expressed abundantly in lactating mammary glands and over-expressed abundantly in >90% of breast carcinomas and metastatic tumors. Transgenic MUC-1 has been shown to associate with all four c-erbB receptors and localizes with erbB1 (EGFR).

Species: Rabbit Monoclonal **Cat#:** Z2791 ›››

IHC: Human cholangiocarcinoma stained with ZR435



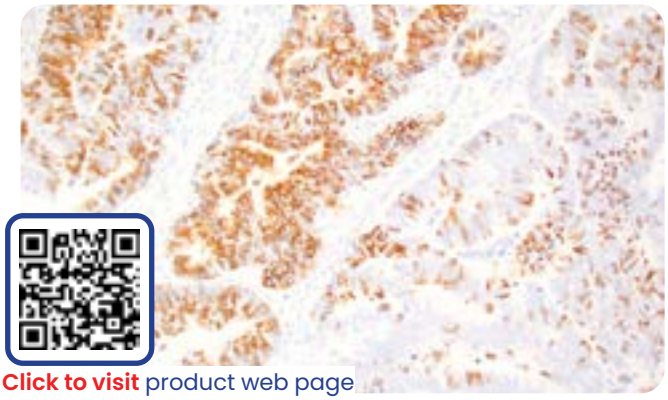
Click to visit product web page

MUC-2 *(clone Ccp58)*

Ccp58 recognizes MUC-2 (Mucin 2), the major intestinal secreted mucin, which is highly expressed in colon, small intestine, airway, and salivary glands. MUC-2 is an important secretory protein found in the human gut. Secreted MUC-2 mucin constitutes the major structural component of the mucus in the colon. MUC-2 mucin plays a role in the protection of the gut barrier, the regulation of microbiota homeostasis, and the prevention of diseases, serving as a specific marker.

Species: Mouse Monoclonal **Cat#:** Z2151 ›››

IHC: Human colon adenocarcinoma stained with Ccp58



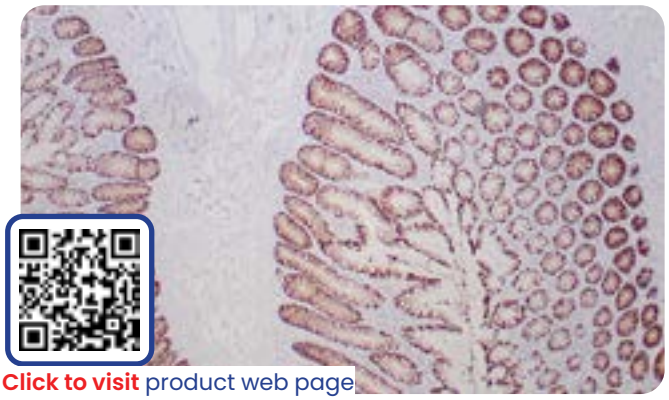
Click to visit product web page

MUC-2 (clone ZR175)

Recombinant. ZR175 recognizes MUC-2 (Mucin 2), the major intestinal secreted mucin, which is highly expressed in colon, small intestine, airway, and salivary glands. MUC-2 is an important secretory protein found in the human gut. Secreted MUC-2 mucin constitutes the major structural component of the mucus in the colon. MUC-2 mucin plays a role in the protection of the gut barrier, the regulation of microbiota homeostasis, and the prevention of diseases, serving as a specific marker.

Species: Rabbit Monoclonal **Cat#:** Z2702 ›››

IHC: Human normal colon stained with ZR175



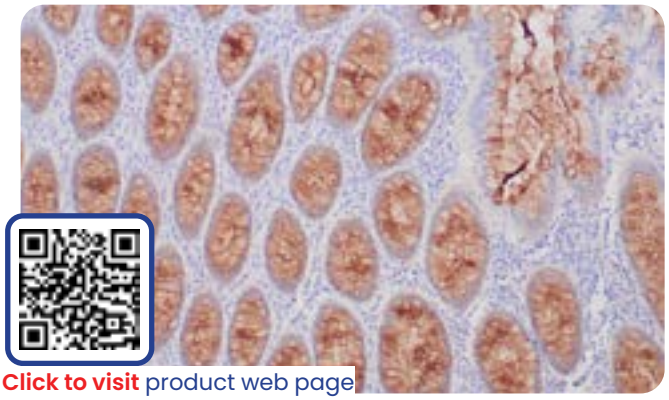
Click to visit product web page

MUC-4 (clone ZR201)

Recombinant. ZR201 recognizes MUC-4, the major constituent of mucus, the viscous secretion that covers epithelial surfaces such as those in the trachea, colon, and cervix. These MUC-4 glycoproteins play an essential role in protecting the epithelial cells and have been implicated in epithelial renewal and differentiation. The MUC-4 gene encodes an integral membrane glycoprotein found on the cell surface. Strikingly, MUC-4 expression in mass-forming carcinomas of the pancreas is an independent factor for poor prognosis.

Species: Rabbit Monoclonal **Cat#:** Z2520 ›››

IHC: Human sclerosing fibrosarcoma stained with ZR201



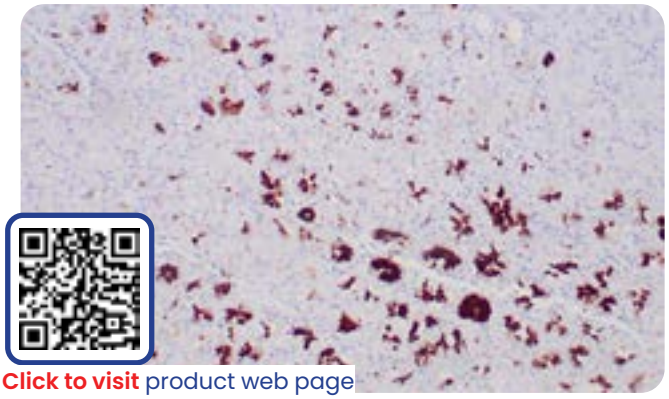
Click to visit product web page

MUC-5AC (clone ZR19)

Recombinant. ZR19 recognizes MUC-5AC (Mucin-5AC), a glycoprotein family member secreted by epithelial cells. This glycoprotein is a high molecular weight structure with multiple cysteine-rich domains in both N- and C-terminal regions. These mucin layers protect the epithelial surfaces from chemical and mechanical damage as well as microbial pathogens. Studies have shown that MUC-5AC is also expressed in several cancer types, suggesting utility for the identification of tumor types and subtypes.

Species: Rabbit Monoclonal **Cat#:** Z2703 ›››

IHC: Human stomach stained with ZR19



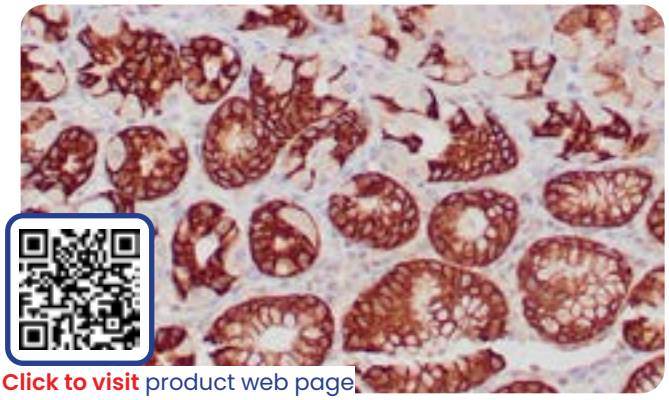
Click to visit product web page

MUC-5AC (clone ZM148)

Recombinant. ZM148 recognizes MUC-5AC (Mucin-5AC), a glycoprotein family member secreted by epithelial cells. This glycoprotein is a high molecular weight structure with multiple cysteine-rich domains in both N- and C-terminal regions. These mucin layers protect the epithelial surfaces from chemical and mechanical damage as well as microbial pathogens. Studies have shown that MUC-5AC is also expressed in several cancer types, suggesting utility for the identification of tumor types and subtypes.

Species: Mouse Monoclonal **Cat#:** Z2461 ›››

IHC: Human gastric mucosa stained with ZM148



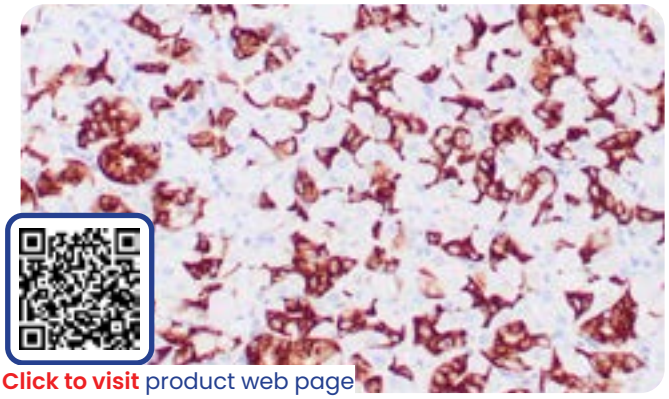
Click to visit product web page

MUC-6 *(clone ZM89)*

Recombinant. ZM89 recognizes MUC-6 (Mucin-6), a gastric mucin that plays an essential role in epithelial cyto-protection from acid, proteases, pathogenic microorganisms, and mechanical trauma in the gastrointestinal tract. MUC-6 expression is highest in the stomach and gall bladder, with lesser expression in the terminal ileum and right colon. In gastric cancer, MUC-6 has an altered expression. MUC-6 is strongly expressed in deep gastric glands, and its expression is altered with increasing degrees of inflammation.

Species: Mouse Monoclonal **Cat#:** Z2399 ›››

IHC: Human gastric mucosa stained with ZM89



Click to visit product web page

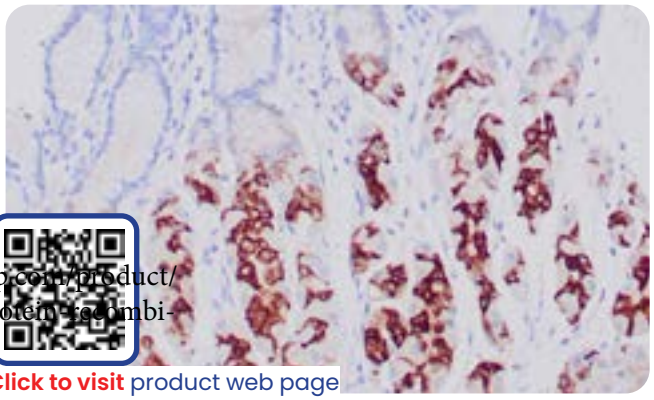
MUC-6 *(clone ZR437)*

Recombinant. ZR437 recognizes MUC-6 (Mucin-6), a gastric mucin that plays an essential role in epithelial cyto-protection from acid, proteases, pathogenic microorganisms, and mechanical trauma in the gastrointestinal tract. MUC-6 expression is highest in the stomach and gall bladder, with lesser expression in the terminal ileum and right colon. In gastric cancer, MUC-6 has an altered expression. MUC-6 is strongly expressed in deep gastric glands, and its expression is altered with increasing degrees of inflammation.

Species: Rabbit Monoclonal **Cat#:** Z2793 ›››

IHC: Human gastric mucosa stained with ZR437

https://zeta-corp.com/product/myelin-basic-protein-recombinant-antibody/



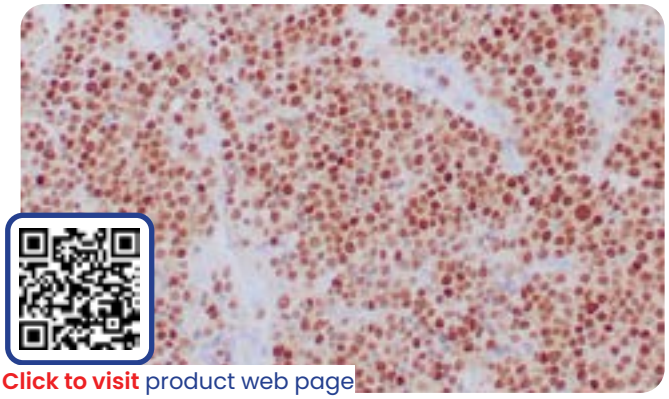
Click to visit product web page

MUM1 *(clone ZR411)*

Recombinant. ZR411 recognizes MUM1 (Melanoma Associated Antigen (Mutated) 1), a nuclear transcription factor necessary for developing and activating B lymphocytes. MUM1 expression may define the final step of intragerminal center B cell differentiation as well as subsequent stages of B cell maturation toward plasma cells. Loss of MUM1 function results in the absence of activated lymphoid cells and Ig secreting plasma cells. MUM1 is found mainly in T-cell lymphomas and neuroblastic tumors.

Species: Rabbit Monoclonal **Cat#:** Z2767 ›››

IHC: Human IgA myeloma stained with ZR411



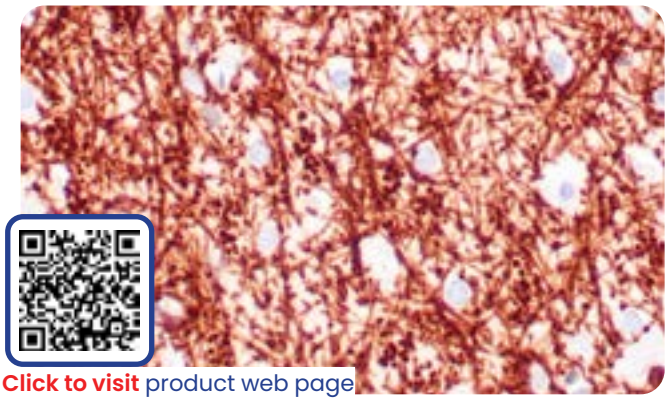
Click to visit product web page

Myelin Basic Protein *(MBP, clone ZM202)*

Recombinant. ZM202 recognizes Myelin Basic Protein (MBP), the second most abundant protein in central nervous system myelin, comprising 30% of the total protein and about 10% of the dry weight of myelin. MBP is the only structural protein found so far to be essential for formation of CNS myelin. This protein can interact with a number of polyanionic proteins including actin, tubulin, calmodulin, and clathrin. MBP may be applicable as a marker for oligodendrogliomas.

Species: Mouse Monoclonal **Cat#:** Z2485 ›››

IHC: Human brain white mater stained with ZM202



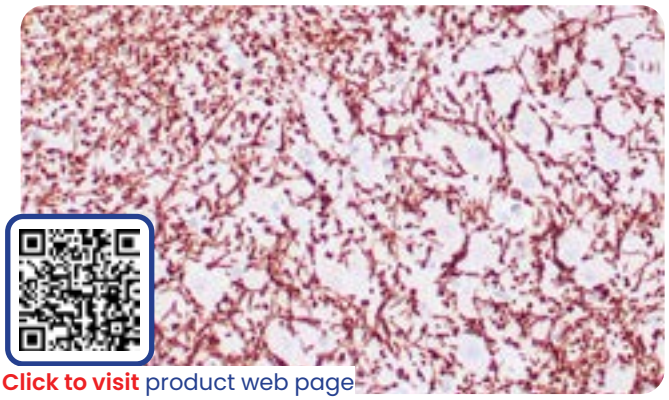
Click to visit product web page

Myelin Basic Protein *(MBP, clone ZR109)*

Recombinant. ZR109 recognizes Myelin Basic Protein (MBP), the second most abundant protein in central nervous system myelin, comprising 30% of the total protein and about 10% of the dry weight of myelin. MBP is the only structural protein found so far to be essential for formation of CNS myelin. This protein can interact with a number of polyanionic proteins including actin, tubulin, calmodulin, and clathrin. MBP may be applicable as a marker for oligodendrogliomas.

Species: Rabbit Monoclonal **Cat#:** Z2411 >>>

IHC: Human brain white mater stained with ZR109



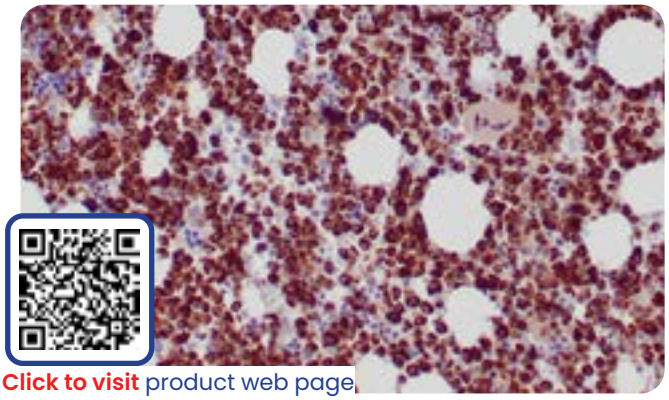
Click to visit product web page

Myeloperoxidase *(clone ZM352)*

Recombinant. ZM352 recognizes Myeloperoxidase (MPO), an important enzyme used by granulocytes during phagocytic lysis of foreign particles engulfed in normal tissues and in a variety of myeloproliferative disorders. Myeloid cells of both neutrophilic and eosinophilic types, at all stages of maturation, exhibit strong cytoplasmic reactivity for MPO. Erythroid precursors, megakaryocytes, lymphoid cells, mast cells, and plasma cells are non-reactive. MPO is useful in differentiating between myeloid and lymphoid leukemias.

Species: Mouse Monoclonal **Cat#:** Z2680 >>>

IHC: Human bone marrow stained with ZM352



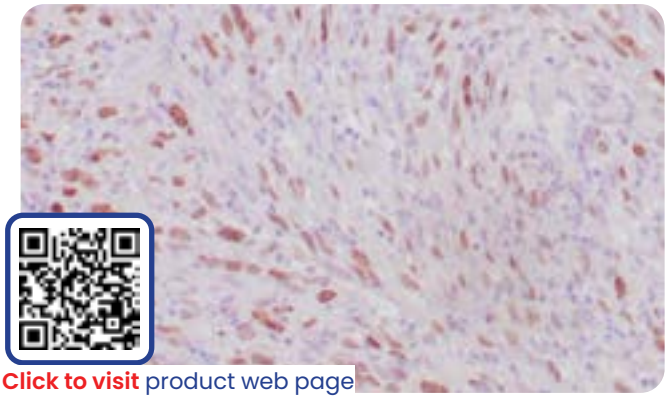
Click to visit product web page

MyoD1 *(clone ZR262)*

Recombinant. ZR262 recognizes MyoD1, one of the MyoD family of myogenic helix-loop-helix transcription factors. MyoD1 is expressed in myoblasts before differentiation while mature normal skeletal muscle does not express MyoD1 protein. MyoD1 is expressed in myoblasts before differentiation while mature skeletal muscle cells lose expression. This antibody may be useful together with Myogenin and Desmin antibodies as a panel of markers since any single tumor is virtually never negative for all three.

Species: Rabbit Monoclonal **Cat#:** Z2576 >>>

IHC: Human rhabdomyosarcoma stained with ZR262



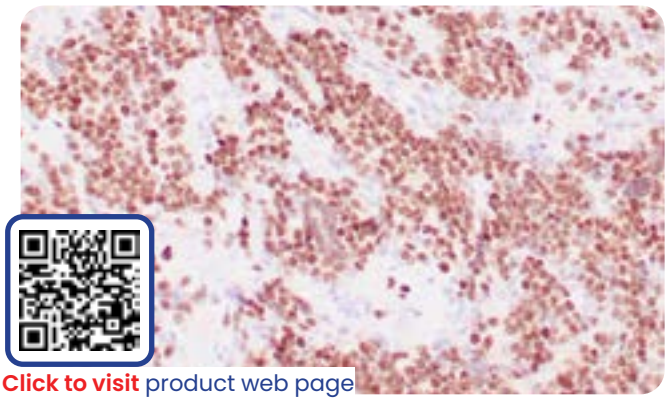
Click to visit product web page

Myogenin *(clone F5D)*

Recombinant. F5D recognizes Myogenin, a member of the MyoD family of myogenic basic helix-loop-helix transcription factors expressed early in skeletal muscle differentiation. Expression of Myogenin is restricted to cells of skeletal muscle origin, making it a useful marker for tumors of the muscle lineage. It is strongly expressed in alveolar rhabdomyosarcomas. Myogenin provides focal nuclear staining in desmoid tumors, infantile myofibromatosis, synovial sarcoma, infantile fibrosarcoma, or entrapped skeletal muscle.

Species: Mouse Monoclonal **Cat#:** Z2054 >>>

IHC: Human rhabdomyosarcoma stained with F5D



Click to visit product web page

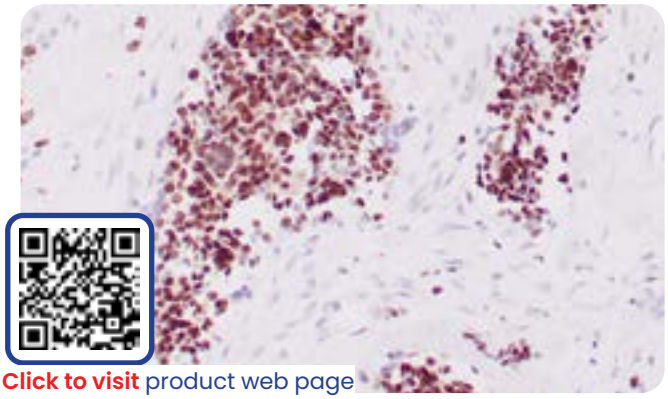
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

Myogenin *(clone ZM149)*

Recombinant. ZM149 recognizes Myogenin, a member of the MyoD family of myogenic basic helix-loop-helix transcription factors expressed early in skeletal muscle differentiation. Expression of Myogenin is restricted to cells of skeletal muscle origin, making it a useful marker for tumors of the muscle lineage. It is strongly expressed in alveolar rhabdomyosarcomas. Myogenin provides focal nuclear staining in desmoid tumors, infantile myofibromatosis, synovial sarcoma, infantile fibrosarcoma, or entrapped skeletal muscle.

Species: Mouse Monoclonal **Cat#:** Z2462 ›››

IHC: Human rhabdomyosarcoma stained with ZM149



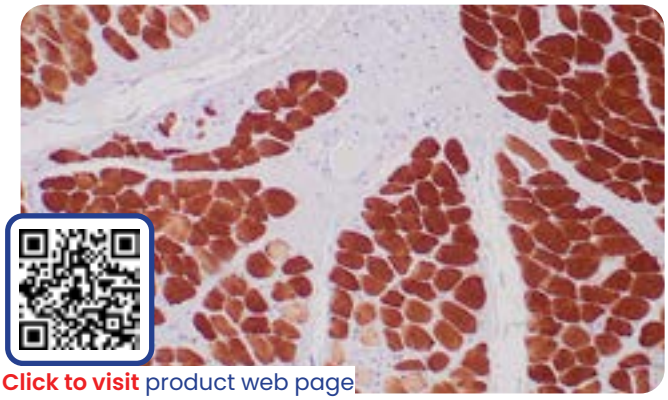
Click to visit product web page

Myoglobin *(clone ZR69)*

Recombinant. ZR69 recognizes Myoglobin, a cytosolic oxygen-binding protein responsible for the storage and diffusion of oxygen within myocytes. Expression of Myoglobin is highest in skeletal and cardiac muscle, functioning as an O2-storage protein in muscle capable of releasing oxygen during periods of hypoxia. In combination with other striated muscle markers, Myoglobin is a helpful tool in the identification of rhabdomyosarcomas and tumors with skeletal muscle differentiation.

Species: Rabbit Monoclonal **Cat#:** Z2379 ›››

IHC: Human skeletal muscle stained with ZR69



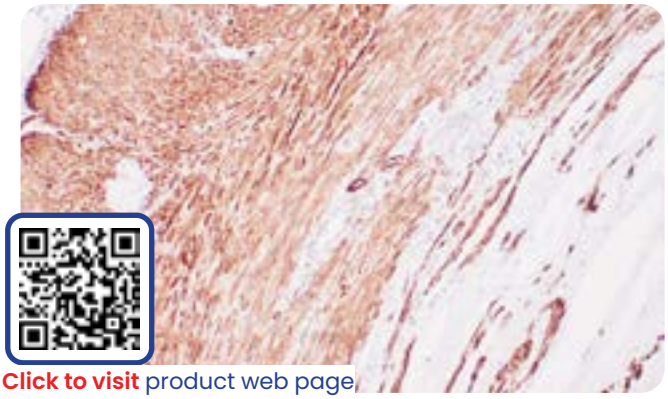
Click to visit product web page

Myosin SMHC *(clone SMMS-1)*

SMMS-1 recognizes Myosin SMHC (Smooth Muscle Heavy Chain), an asymmetric protein with a globular head and an alpha-helical coiled-coil rod that is responsible for the assembly of myosin into filaments. Myosin SMHC clones react with human visceral and vascular smooth muscle cells. This antibody also reacts with human myoepithelial cells and is useful in distinguishing between benign sclerosing breast lesions and infiltrating carcinomas by staining benign myoepithelial layers.

Species: Mouse Monoclonal **Cat#:** Z2229 ›››

IHC: Human colon wall stained with SMMS-1



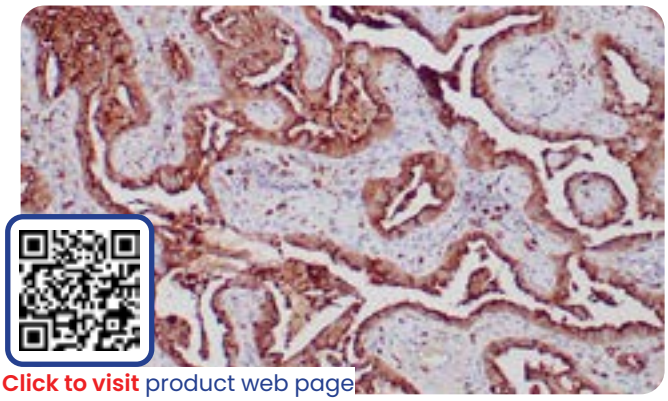
Click to visit product web page

Napsin-A *(clone ZR206)*

Recombinant. ZR206 recognizes Napsin A, a pepsin-like aspartic proteinase associated with the maturation of surfactant protein B. Immunohistochemical studies revealed high expression levels of Napsin A in the human lung and kidney. Napsin A is expressed in type II pneumocytes and adenocarcinomas of the lung. The high specificity of Napsin A in adenocarcinomas of the lung is helpful in distinguishing primary lung adenocarcinomas from other origins.

Species: Rabbit Monoclonal **Cat#:** Z2705 ›››

IHC: Human lung adenocarcinoma stained with ZR206



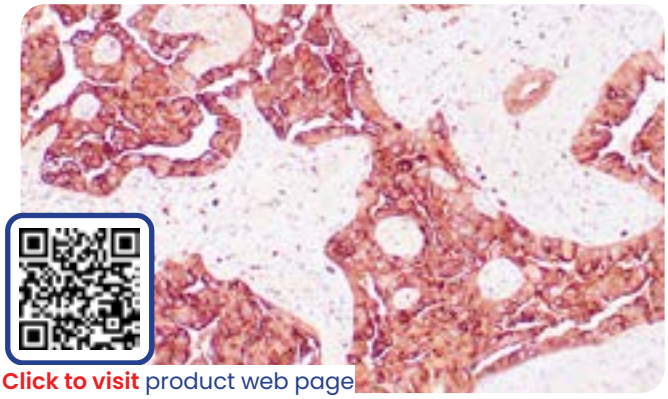
Click to visit product web page

Napsin-A *(clone ZM11)*

ZM11 recognizes Napsin A, a pepsin-like aspartic proteinase associated with the maturation of surfactant protein B. Immunohistochemical studies revealed high expression levels of Napsin A in the human lung and kidney. Napsin A is expressed in type II pneumocytes and adenocarcinomas of the lung. The high specificity of Napsin A in adenocarcinomas of the lung is helpful in distinguishing primary lung adenocarcinomas from other origins.

Species: Mouse Monoclonal **Cat#:** Z2294 ›››

IHC: Human lung adenocarcinoma stained with ZM11



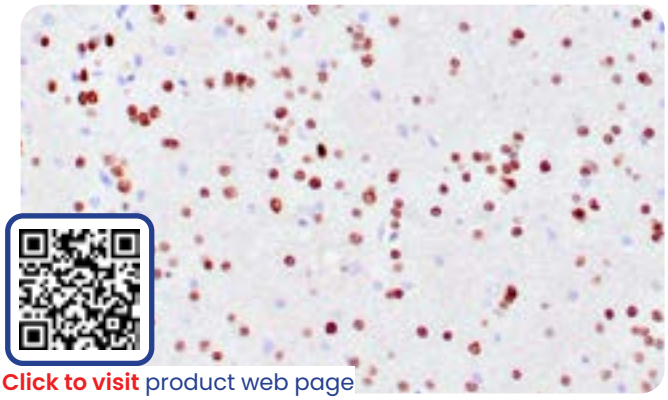
Click to visit product web page

NeuN *(clone A60)*

A60 recognizes NeuN, a DNA-binding, neuron-specific protein which is present in most central nervous system and peripheral nervous system neuronal cell types. Immunohistochemically detectable NeuN protein first appears at developmental timepoints that correspond with the withdrawal of the neuron from the cell cycle and with the initiation of terminal differentiation. Immunoreactivity appears around embryonic day 9.5 in the mouse neural tube and is extensive throughout the developing nervous system by day 12.5. ›››

Species: Mouse Monoclonal **Cat#:** Z2178

IHC: Human cerebellum stained with A60



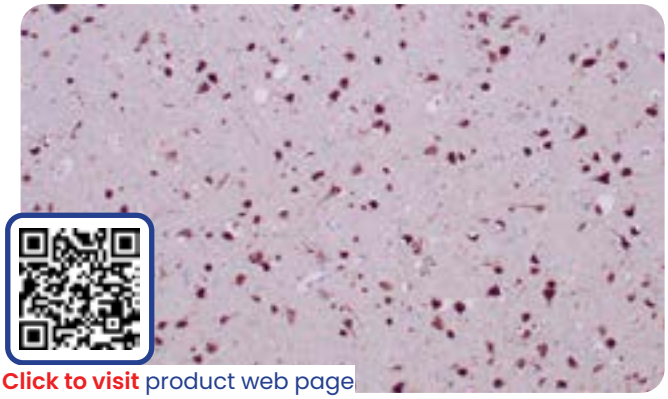
Click to visit product web page

NeuN *(clone ZR386)*

Recombinant. ZR386 recognizes NeuN, a DNA-binding, neuron-specific protein which is present in most central nervous system and peripheral nervous system neuronal cell types. Immunohistochemically detectable NeuN protein first appears at developmental timepoints that correspond with the withdrawal of the neuron from the cell cycle and with the initiation of terminal differentiation. Immunoreactivity appears around embryonic day 9.5 in the mouse neural tube and is extensive throughout the developing nervous system by day 12.5.

Species: Rabbit Monoclonal **Cat#:** Z2677 ›››

IHC: Human cerebrum stained with ZR386



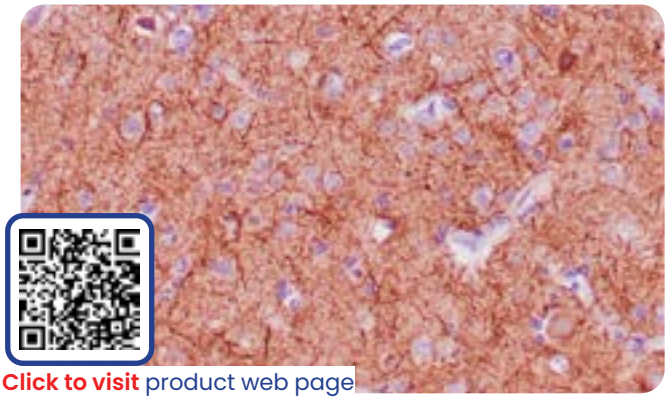
Click to visit product web page

Neurofilament *(clone 2F11)*

2F11 recognizes Neurofilament (NF-L), the main structural elements of axons and dendrites found in neurons, peripheral nerves, and sympathetic ganglion cells. The antibody reacts with a 68kDa protein, identified as a light subunit of neurofilaments. Neurofilaments consist of three major subunits with molecular weights of 68kDa, 160kDa, and 200kDa. Neurofilament antibody stains a number of neural, neuroendocrine, and endocrine tumors, including neuromas, ganglioneuromas, gangliogliomas, and neuroblastomas.

Species: Mouse Monoclonal **Cat#:** Z2091 ›››

IHC: Human cerebellum stained with 2F11



Click to visit product web page

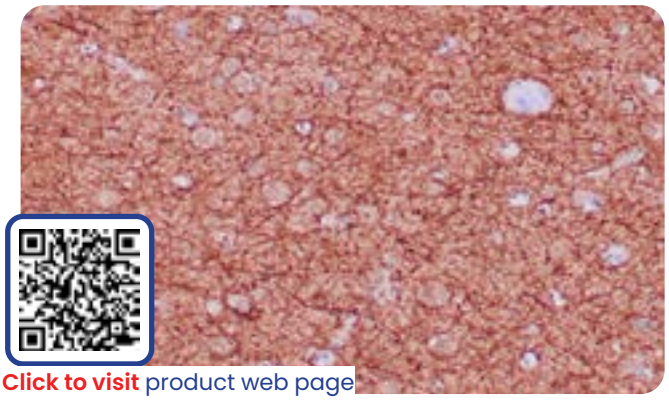
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

Neurofilament *(clone ZR216)*

Recombinant. ZR216 recognizes Neurofilament (NF-L), the main structural elements of axons and dendrites found in neurons, peripheral nerves, and sympathetic ganglion cells. The antibody reacts with a 68kDa protein, identified as a light subunit of neurofilaments. Neurofilaments consist of three major subunits with molecular weights of 68kDa, 160kDa, and 200kDa. Neurofilament antibody stains a number of neural, neuroendocrine, and endocrine tumors, including neuromas, ganglioneuromas, gangliogliomas, and neuroblastomas.

Species: Rabbit Monoclonal **Cat#:** Z2706 ›››

IHC: Human cerebellum stained with ZR216



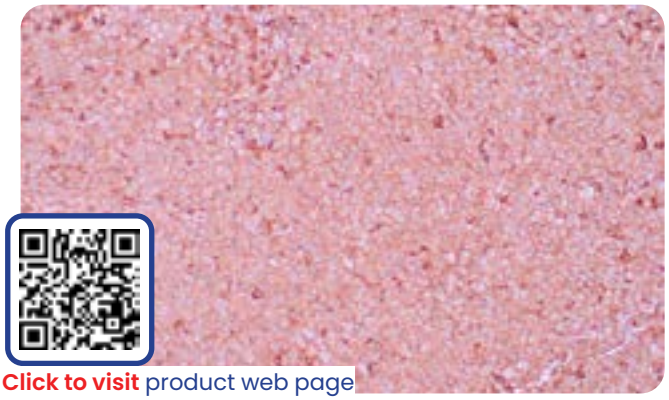
Click to visit product web page

NGFR *(clone ZM55)*

Recombinant. ZM55 recognizes NGFR (Nerve Growth Factor Receptor), the first of neurotrophic receptors to be isolated and a member of the tumor necrosis factor receptor family. NGFR expression is ubiquitous and not limited to the nervous system, as it appears in mature non-neural cells like perivascular cells, follicular dendritic cells, and basal epithelial cells. The NGFR antibody labels myoepithelial cells of breast ducts and intraductal papillomas, aiding in the diagnosis of malignancy.

Species: Mouse Monoclonal **Cat#:** Z2365 ›››

IHC: Human malignant melanoma stained with ZM55



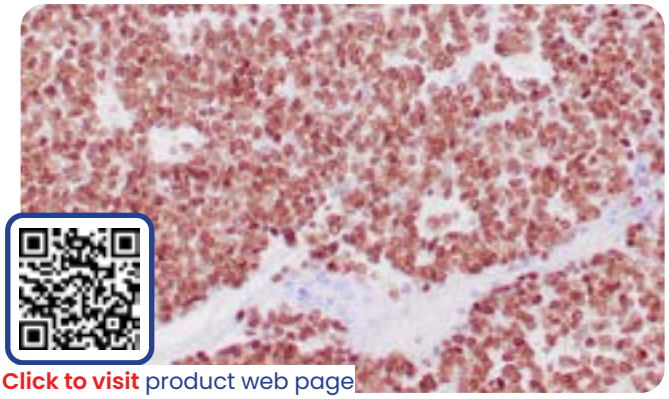
Click to visit product web page

NKX2.2 *(clone ZM14)*

Recombinant. ZM14 recognizes NKX2.2, which is expressed in neuroendocrine tumors of the gut, making it a potential marker for studying gastrointestinal neuroendocrine tumors. More recently, NKX2.2 protein was identified as a target of EWSR1-FLI1, the fusion protein specific to Ewing sarcoma. It has been shown to be differentially upregulated in Ewing sarcoma, acts as a valuable marker for Ewing sarcoma, and aids in the differential diagnosis of small round cell tumors.

Species: Mouse Monoclonal **Cat#:** Z2348 ›››

IHC: Human Ewing's sarcoma stained with ZM14



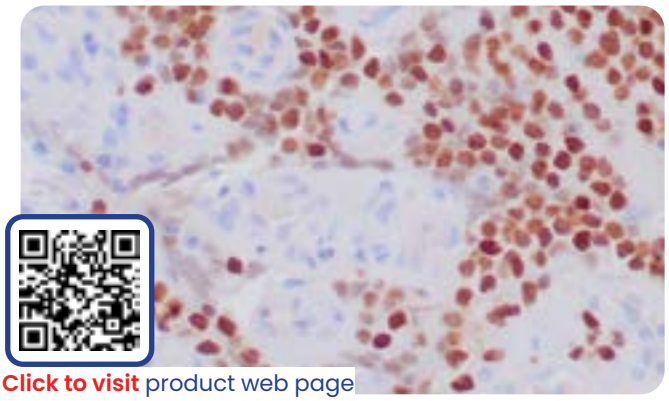
Click to visit product web page

NKX2.2 *(clone ZR438)*

Recombinant. ZR438 recognizes NKX2.2, which is expressed in neuroendocrine tumors of the gut, making it a potential marker for studying gastrointestinal neuroendocrine tumors. More recently, NKX2.2 protein was identified as a target of EWSR1-FLI1, the fusion protein specific to Ewing sarcoma. It has been shown to be differentially upregulated in Ewing sarcoma, acts as a valuable marker for Ewing sarcoma, and aids in the differential diagnosis of small round cell tumors.

Species: Rabbit Monoclonal **Cat#:** Z2794 ›››

IHC: Human Ewing's sarcoma stained with ZR438



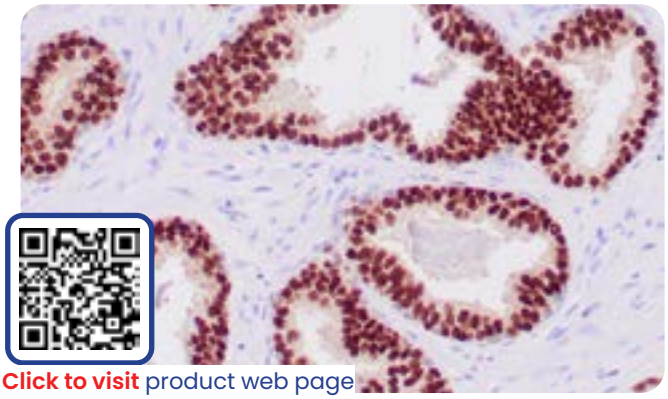
Click to visit product web page

NKX3.1 (clone ZM95)

Recombinant. ZM95 recognizes NKX3.1, a prostate-specific gene encoding a transcription factor essential in normal prostate development and carcinogenesis. NKX3.1 expression is highly restricted to prostate epithelial cells and therefore can be used as a diagnostic biomarker for prostate cancer and other metastatic lesions of prostatic origin. Consequently, immunohistochemical staining of NKX3.1, along with other prostate-restricted markers, may be valuable for the definitive determination of prostatic origin.

Species: Mouse Monoclonal **Cat#:** Z2395 ›››

IHC: Human prostate stained with ZM95



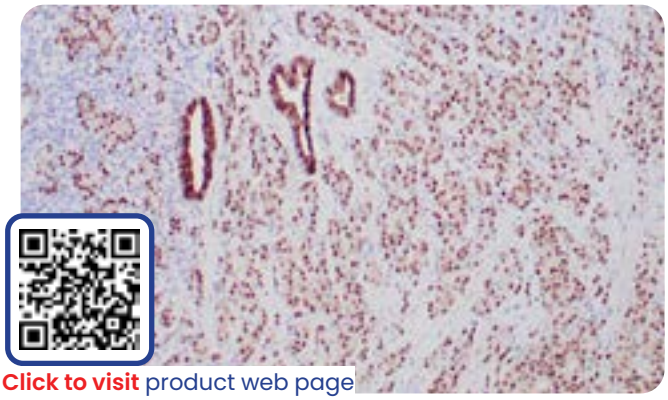
Click to visit product web page

NKX3.1 (clone ZR222)

Recombinant. ZR222 recognizes NKX3.1, a prostate-specific gene encoding a transcription factor essential in normal prostate development and carcinogenesis. NKX3.1 expression is highly restricted to prostate epithelial cells and therefore can be used as a diagnostic biomarker for prostate cancer and other metastatic lesions of prostatic origin. Consequently, immunohistochemical staining of NKX3.1, along with other prostate-restricted markers, may be valuable for the definitive determination of prostatic origin.

Species: Rabbit Monoclonal **Cat#:** Z2707 ›››

IHC: Prostate adenocarcinoma stained with ZR222



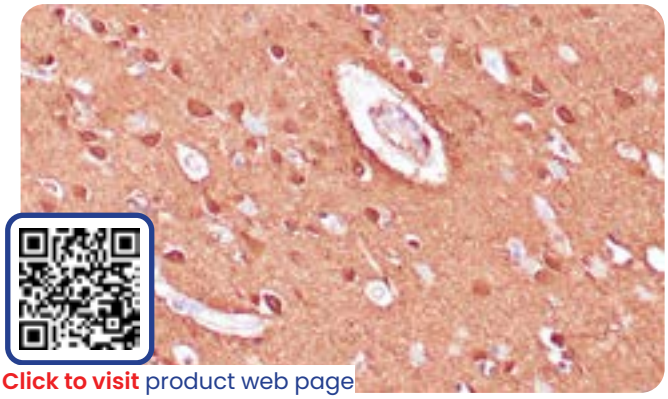
Click to visit product web page

NSE (clone ZM24)

Recombinant. ZM24 recognizes NSE-gamma, a protein of about 50kDa which is identified as gamma-enolase. Three isoenzymes of enolase have been identified: alpha, beta, and gamma. Alpha-isoform is expressed in most tissues, beta-form in muscle tissue, and gamma-enolase is found only in nervous tissue. NSE-gamma is a useful marker to identify peripheral nerves and tumors of neuroendocrine origins, used in combination with Chromogranin A and Neurofilament.

Species: Mouse Monoclonal **Cat#:** Z2351 ›››

IHC: Human cerebellum stained with ZM24



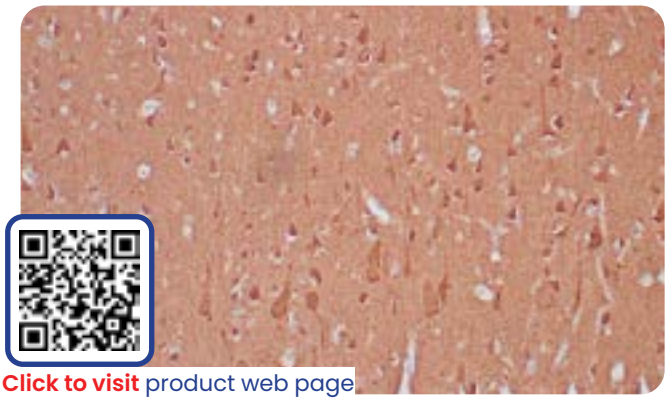
Click to visit product web page

NSE (clone ZR406)

Recombinant. ZR406 recognizes NSE-gamma, a protein of about 50kDa which is identified as gamma-enolase. Three isoenzymes of enolase have been identified: alpha, beta, and gamma. Alpha-isoform is expressed in most tissues, beta-form in muscle tissue, and gamma-enolase is found only in nervous tissue. NSE-gamma is a useful marker to identify peripheral nerves and tumors of neuroendocrine origins, used in combination with Chromogranin A and Neurofilament.

Species: Rabbit Monoclonal **Cat#:** Z2762 ›››

IHC: Human cerebellum stained with ZR406



Click to visit product web page

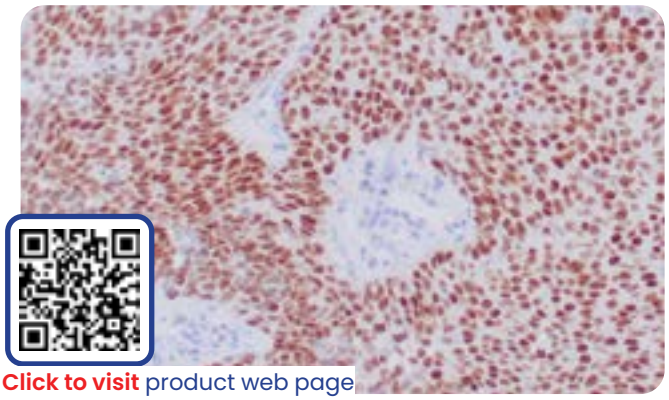
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

NUT *(clone ZR453)*

ZR453 recognizes NUT (Nuclear Protein in Testis), which is involved in a variety of cellular processes. NUT carcinoma is a rare and aggressive type of cancer that primarily affects the thoracic and head and neck regions, characterized by a NUT fusion gene. NUT antibody staining is nuclear in positive tumor cells. NUT is variably expressed among germ cell tumors including dysgerminomas, immature teratomas, and spermatocytic seminoma.

Species: Rabbit Monoclonal **Cat#:** Z2810 ›››

IHC: Human NUT carcinoma stained with ZR453



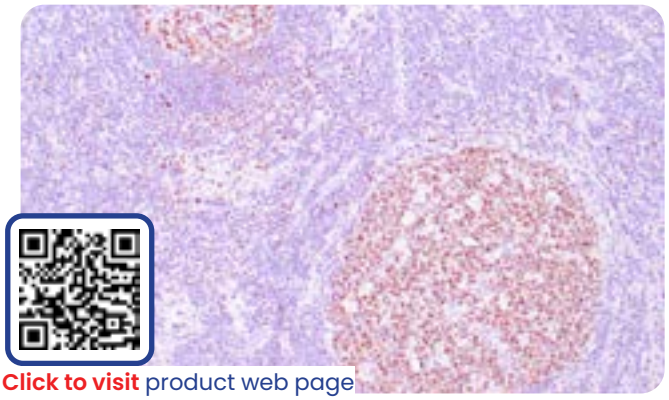
Click to visit product web page

OCT-2 *(clone ZM90)*

Recombinant. ZM90 recognizes OCT-2, a transcription factor of the POU homeodomain family that binds to the Ig gene octamer sites, regulating B-cell-specific genes. OCT-2 expression can be used as a B-cell lineage and differentiation marker. Germinal center B-cells, mantle B-cells, monocytoid B-cells, and plasma cells show high-level expression of OCT-2. Additionally, mantle cell lymphoma, follicular lymphoma, marginal zone lymphoma, plasmacytoma, Burkitt lymphoma, and diffuse large B-cell lymphoma display increased expression.

Species: Mouse Monoclonal **Cat#:** Z2400 ›››

IHC: Human lymph node stained with ZM90



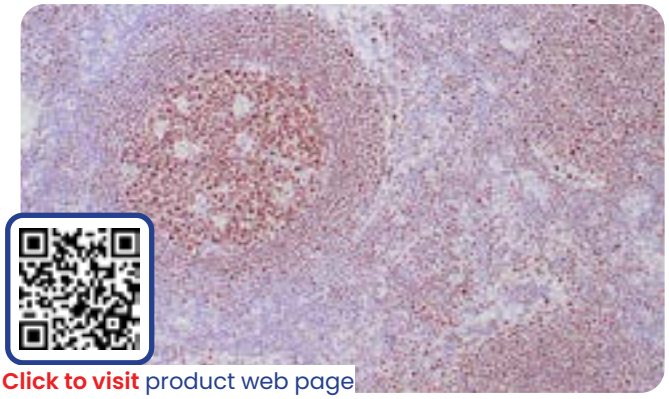
Click to visit product web page

OCT-2 *(clone ZR227)*

Recombinant. ZR227 recognizes OCT-2, a transcription factor of the POU homeodomain family that binds to the Ig gene octamer sites, regulating B-cell-specific genes. OCT-2 expression can be used as a B-cell lineage and differentiation marker. Germinal center B-cells, mantle B-cells, monocytoid B-cells, and plasma cells show high-level expression of OCT-2. Additionally, mantle cell lymphoma, follicular lymphoma, marginal zone lymphoma, plasmacytoma, Burkitt lymphoma, and diffuse large B-cell lymphoma display increased expression.

Species: Rabbit Monoclonal **Cat#:** Z2708 ›››

IHC: Human lymph node stained with ZR227



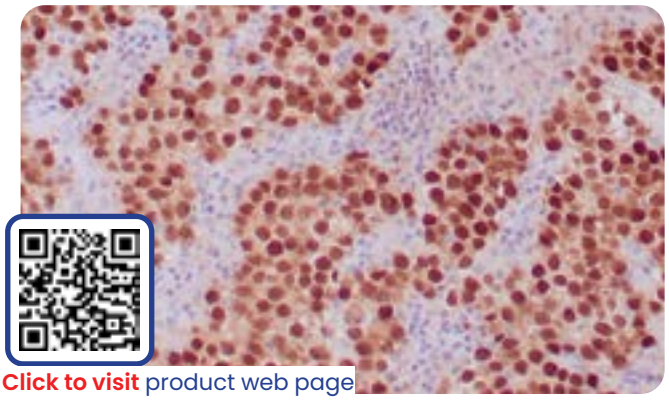
Click to visit product web page

OCT-4 *(clone ZR364)*

Recombinant. ZR364 recognizes OCT-4, a member of the POU family of transcription factors involved in regulating pluripotency during normal development, detectable in embryonic stem and germ cells. OCT-4 is a crucial regulator of self-renewal in embryonic stem cells, and its expression is correlated with tumorigenesis, recurrence, or resistance to therapies. OCT-4 is expressed in undifferentiated pluripotent cells, germ cells in the ovary, and testes. This antibody is useful in identifying primary and metastatic germ cell tumors.

Species: Rabbit Monoclonal **Cat#:** Z2604 ›››

IHC: Human seminoma stained with ZR364



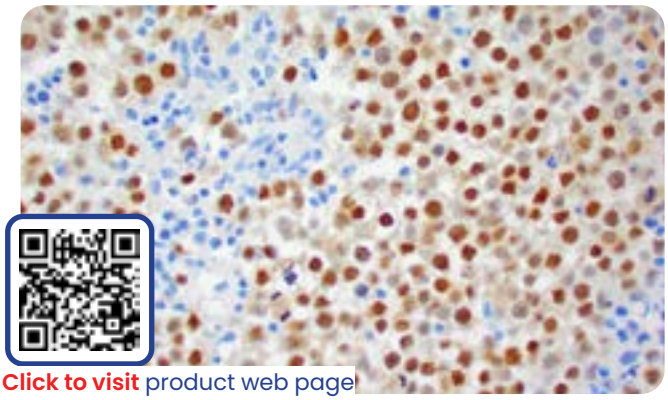
Click to visit product web page

OCT-4 *(clone C-10)*

C-10 recognizes OCT-4, a member of the POU family of transcription factors involved in regulating pluripotency during normal development, detectable in embryonic stem and germ cells. OCT-4 is a crucial regulator of self-renewal in embryonic stem cells, and its expression is correlated with tumorigenesis, recurrence, or resistance to therapies. OCT-4 is expressed in undifferentiated pluripotent cells, germ cells in the ovary, and testes. This antibody is useful in identifying primary and metastatic germ cell tumors.

Species: Mouse Monoclonal **Cat#:** Z2104 ›››

IHC: Human seminoma stained with C-10



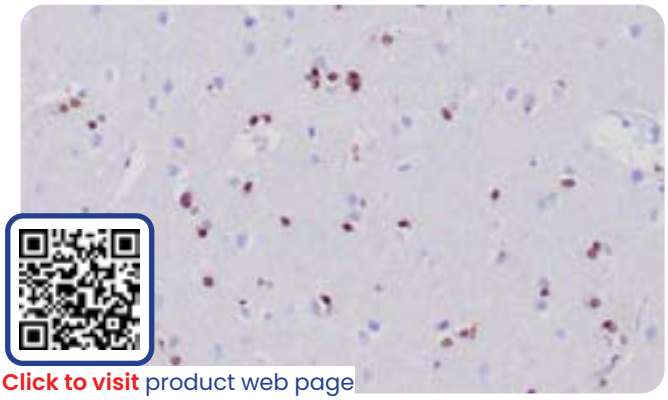
Click to visit product web page

Olig2 *(clone ZR340)*

Recombinant. ZR340 recognizes OLIG2, a basic helix-loop-helix transcription factor involved in oligodendroglial specification with an important role in development. OLIG2 is a marker of oligodendrocyte progenitor cells and is essential for selecting motor neuron and oligodendrocyte fates. OLIG2 expression has been reported in most glial tumors, such as oligodendrogliomas and astrocytomas. Conversely, no OLIG2 expression has been found in non-glial tumors including neuroepithelial tumors, ependymomas, medulloblastomas, or schwannomas.

Species: Rabbit Monoclonal **Cat#:** Z2646 ›››

IHC: Human cerebrum stained with ZR340



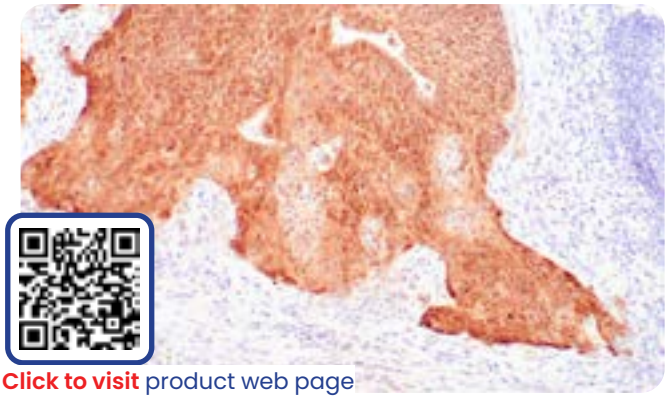
Click to visit product web page

p16INK4a *(clone G175-405)*

G175-405 recognizes p16INK4a, a tumor suppressor protein that is a specific inhibitor of cdk4/cdk6 and is involved in the pathogenesis of a variety of malignancies. Alterations are reported among melanomas, gliomas, esophageal, pancreatic, lung, urinary bladder carcinomas, and some types of leukemia. Expression of p16INK4a is highly correlated with human papilloma virus (HPV) infection in head and neck squamous cell carcinomas. It serves as an important prognostic indicator in HNSCC.

Species: Mouse Monoclonal **Cat#:** Z2117 ›››

IHC: High grade cervical intraepithelial neoplasia (CINIII) stained with G175-405



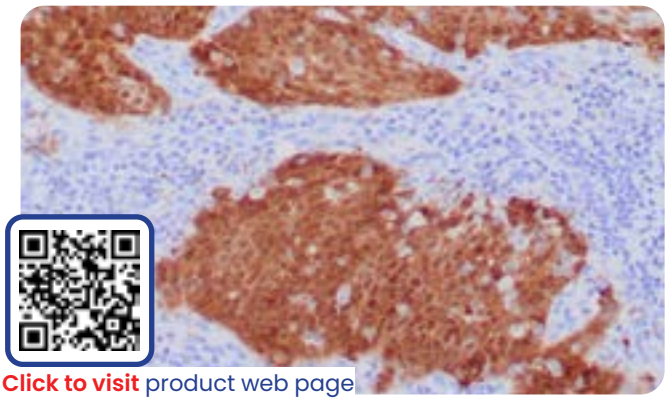
Click to visit product web page

p16INK4a *(clone ZR407)*

Recombinant. ZR407 recognizes p16INK4a, a tumor suppressor protein. p16INK4a is a specific inhibitor of cdk4/cdk6 involved in the pathogenesis of a variety of malignancies. Recent analyses of the p16INK4a gene revealed homozygous deletions, nonsense, missense, or frameshift mutations in several human cancers. Although the frequency of p16INK4a abnormalities is higher in tumor-derived cell lines than in unselected primary tumors, significant subsets of clinical cases with aberrant p16INK4a gene have been reported among melanomas, gliomas, esophageal, pancreatic, lung, and urinary bladder carcinomas.

Species: Rabbit Monoclonal **Cat#:** Z2763 ›››

IHC: H&N invasive squamous cell carcinoma stained with ZR407



Click to visit product web page

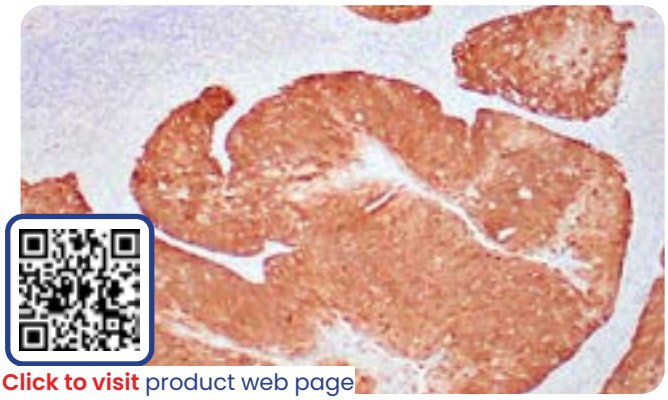
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

p16INK4a (clone JC2)

JC2 recognizes p16INK4a, a tumor suppressor protein. p16INK4a is a specific inhibitor of cdk4/cdk6 involved in the pathogenesis of a variety of malignancies. Recent analyses of the p16INK4a gene revealed homozygous deletions, nonsense, missense, or frameshift mutations in several human cancers. Although the frequency of p16INK4a abnormalities is higher in tumor-derived cell lines than in unselected primary tumors, significant subsets of clinical cases with aberrant p16INK4a gene have been reported among melanomas, gliomas, esophageal, pancreatic, lung, and urinary bladder carcinomas.

Species: Mouse Monoclonal **Cat#:** Z2567 ›››

IHC: Cervical invasive squamous cell carcinoma stained with JC2



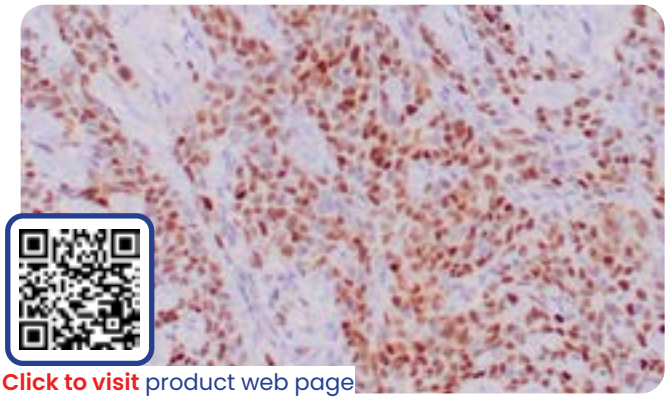
Click to visit product web page

p21WAF1 (clone ZR288)

Recombinant. ZR288 recognizes p21 WAF1, a tumor suppressor protein involved in the pathogenesis of a variety of cancers. The p21 WAF1 antibody recognizes a 21kDa/p21 protein. This p21 WAF1 antibody is highly specific to p21 and shows no cross-reaction with other closely related mitotic inhibitors. p21 is a specific inhibitor of cdk's and a tumor suppressor involved in the pathogenesis of a variety of malignancies. The expression of the p21 gene acts as an inhibitor of the cell cycle during G1 phase.

Species: Rabbit Monoclonal **Cat#:** Z2602 ›››

IHC: Human colon adenocarcinoma stained with ZR288



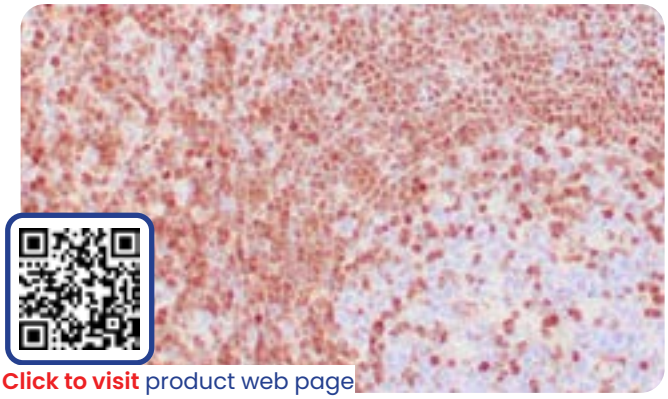
Click to visit product web page

p27KIP1 (clone SX53G8)

SX53G8 recognizes p27Kip1, a candidate tumor suppressor gene, functions as a negative regulator of G1 progression and has been proposed to function as a possible mediator of TGF-beta induced G1 arrest. Clone SX53G8 co-precipitates cdk4 in complex with p27Kip1 and is excellent for staining of formalin fixed tissues. p27Kip1 is a potent tight-binding inhibitor of several G1 cyclin complexes, and is a negative regulator of cell proliferation. It is used as an aid in identifying complete hydatidiform mole.

Species: Mouse Monoclonal **Cat#:** Z2158 ›››

IHC: Human B-cell lymphoma stained with SX53G8



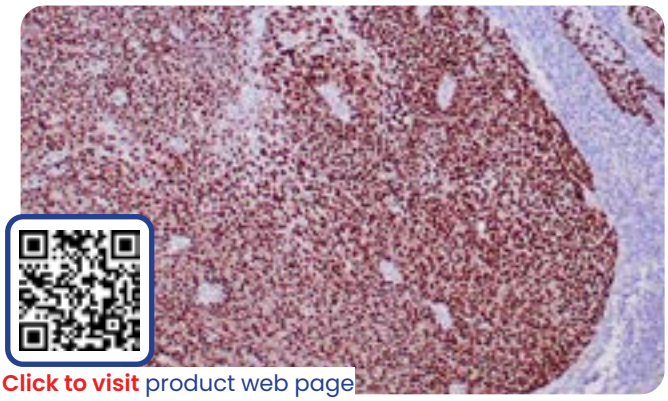
Click to visit product web page

p40 (clone ZR303)

Recombinant. ZR303 recognizes p63 (antibody recognizing TAp63 only), an isoform of p53 and this p63 functions as a stem cell factor that is responsible for maintaining cells in an uncommitted state with regenerative potential. This role for p63 may be recapitulated in tumors derived from these cells: p63 is usually expressed in the basal or progenitor cell layer of stratified epithelia, the myoepithelial cells of some glandular epithelia, and myoepithelial cells of breast and salivary glands, trophoblasts and thymic epithelial cells.

Species: Rabbit Monoclonal **Cat#:** Z2733 ›››

IHC: Human lung squamous cell carcinoma stained with ZR303



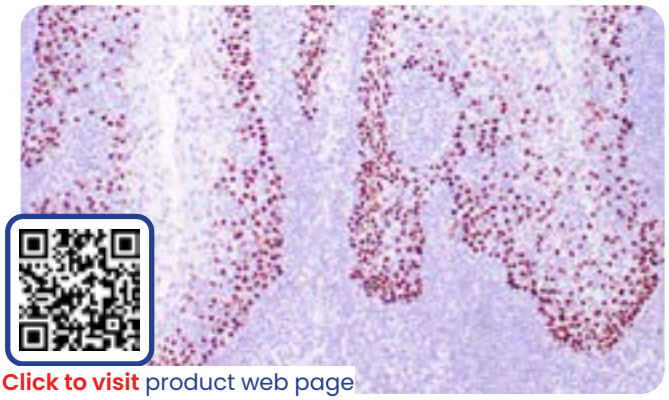
Click to visit product web page

p40 (clone ZR8)

Recombinant. ZR8 recognizes p63 (antibody recognizing TAp63 only), an isoform of p53 and this p63 functions as a stem cell factor that is responsible for maintaining cells in an uncommitted state with regenerative potential. This role for p63 may be recapitulated in tumors derived from these cells: p63 is usually expressed in the basal or progenitor cell layer of stratified epithelia, the myoepithelial cells of some glandular epithelia, and myoepithelial cells of breast and salivary glands, trophoblasts and thymic epithelial cells.

Species: Rabbit Monoclonal **Cat#:** Z2004 ›››

IHC: Human tonsil stained with ZR8



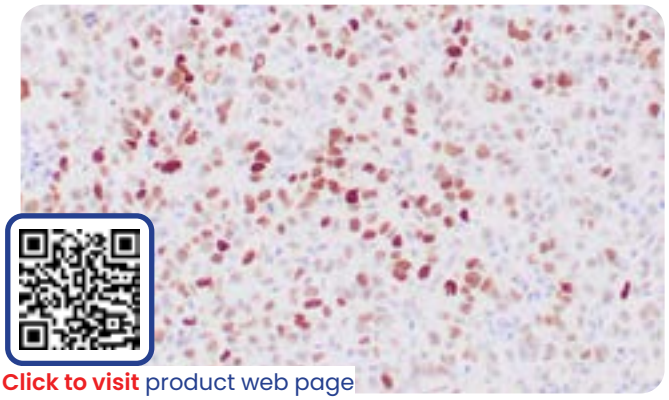
Click to visit product web page

p53 (clone ZR153)

Recombinant. ZR153 recognizes p53, a 53kDa protein, which is identified as the p53 suppressor gene product. Zeta's p53 antibody reacts with the mutant as well as the wild form of p53 protein. p53 is a tumor suppressor gene expressed in a wide variety of tissue types and is involved in regulating cell growth, replication, and apoptosis. p53 binds to MDM2, SV40 T antigen and human papilloma virus E6 protein. Positive nuclear staining has been reported as a negative factor.

Species: Rabbit Monoclonal **Cat#:** Z2466 ›››

IHC: Human colon carcinoma infiltrating fat stained with ZR153



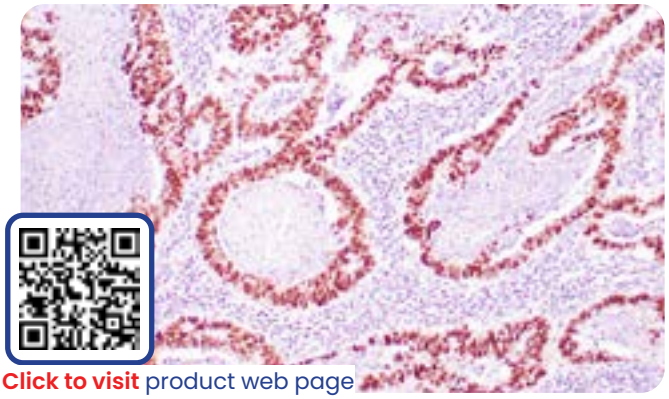
Click to visit product web page

p53 (clone DO-7)

DO-7 recognizes p53, a 53kDa protein, which is identified as the p53 suppressor gene product. Zeta's p53 antibody reacts with the mutant as well as the wild form of p53 protein. p53 is a tumor suppressor gene expressed in a wide variety of tissue types and is involved in regulating cell growth, replication, and apoptosis. p53 binds to MDM2, SV40 T antigen and human papilloma virus E6 protein. Positive nuclear staining has been reported as a negative factor.

Species: Mouse Monoclonal **Cat#:** Z2029 ›››

IHC: Human breast carcinoma infiltrating fat stained with DO-7



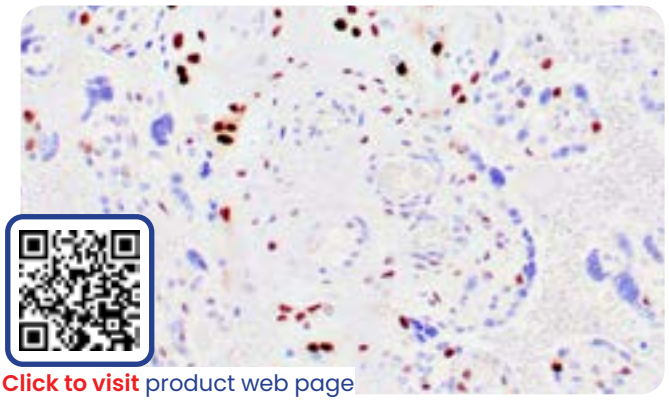
Click to visit product web page

p57Kip2 (clone KP10)

KP10 recognizes p57Kip2, a protein p57Kip2 with no cross-reaction with p27Kip1. p57Kip2 is a potent tight-binding inhibitor of several G1 cyclin complexes, and is a negative regulator of cell proliferation. Antibodies to p57 have been used as an aid in the identification of complete hydatidiform mole (CHM) from partial hydatidiform mole (PHM) (in which cytotrophoblasts and stromal cells stain). The histological differentiation of complete mole, partial mole, and hydropic spontaneous abortion is problematic. Most complete hydatidiform moles are diploid.

Species: Mouse Monoclonal **Cat#:** Z2173 ›››

IHC: Human partial mole stained with KP10



Click to visit product web page

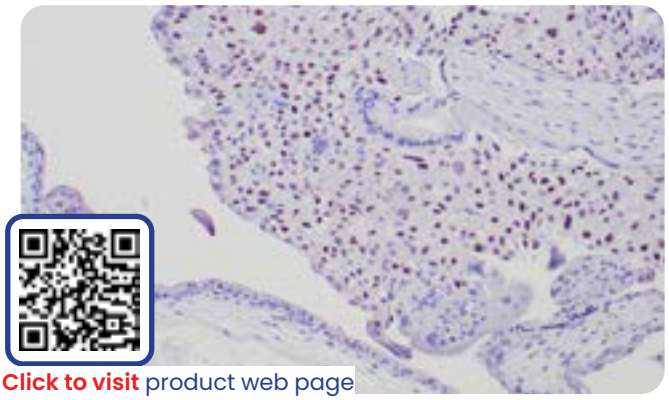
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

p57Kip2 (clone ZR230)

Recombinant. ZR230 recognizes p57Kip2, a protein with no cross-reaction with p27Kip1. p57Kip2 is a potent tight-binding inhibitor of several G1 cyclin complexes, and is a negative regulator of cell proliferation. Antibodies to p57 have been used as an aid in the identification of complete hydatidiform mole (CHM) from partial hydatidiform mole (PHM). The histological differentiation of complete mole, partial mole, and hydropic spontaneous abortion is problematic. Most complete hydatidiform moles are diploid, whereas most partial moles are triploid. Ploidy studies will identify partial moles.

Species: Rabbit Monoclonal **Cat#:** Z2709 ›››

IHC: Human complete moles stained with ZR230



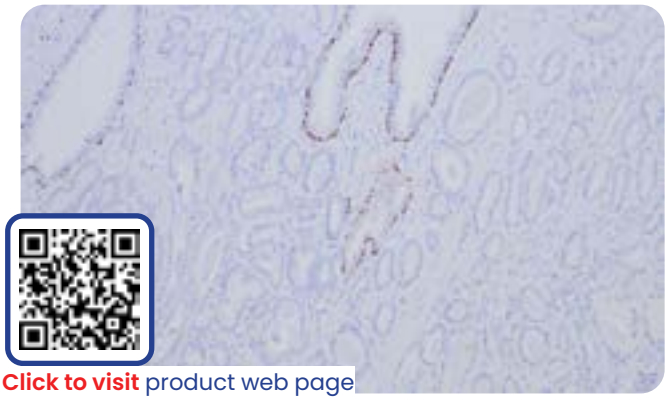
Click to visit product web page

p63 (clone ZR439)

Recombinant. ZR439 recognizes p63, a homolog of the tumor suppressor p53. p63 is identified in basal cells in the epithelial layers of various tissues, including epidermis, cervix, urothelium, breast and prostate. p63 was detected in nuclei of the basal epithelium in normal prostate glands; however, p63 was not expressed in malignant tumors of the prostate. As a result, p63 has been reported as a useful marker for differentiating benign from malignant lesions in the prostate, particularly when used in combination with markers of high molecular weight cytokeratins.

Species: Rabbit Monoclonal **Cat#:** Z2795 ›››

IHC: Human breast stained with ZR439



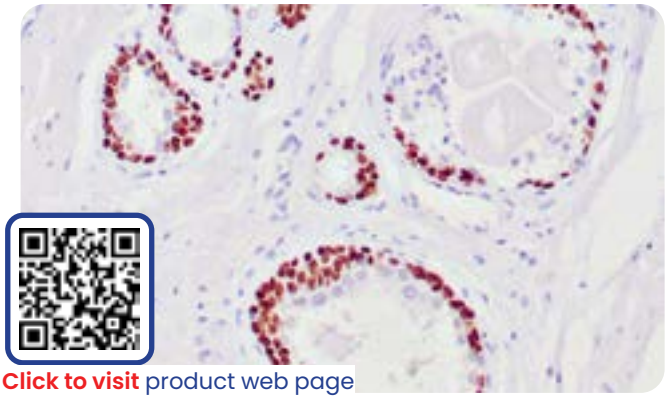
Click to visit product web page

p63 (clone 4A4)

4A4 recognizes p63, a homolog of the tumor suppressor p53. p63 is identified in basal cells in the epithelial layers of a variety of tissues, including epidermis, cervix, urothelium, breast and prostate. p63 was detected in nuclei of the basal epithelium in normal prostate glands; however, p63 was not expressed in malignant tumors of the prostate. p63 has been reported as a useful marker for differentiating benign from malignant lesions in the prostate. p63 has also been shown to be a sensitive marker for lung squamous cell carcinomas.

Species: Mouse Monoclonal **Cat#:** Z2003 ›››

IHC: Human breast stained with 4A4



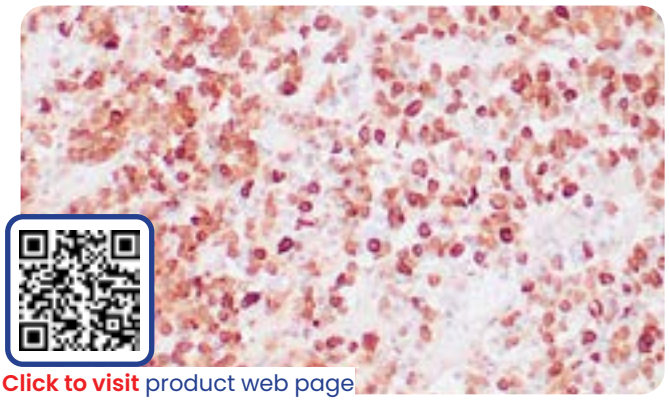
Click to visit product web page

p63 (clone ZM70)

ZM70 recognizes p63, a homolog of the tumor suppressor p53. p63 is identified in basal cells in the epithelial layers of a variety of tissues, including epidermis, cervix, urothelium, breast and prostate. p63 was detected in nuclei of the basal epithelium in normal prostate glands; however, p63 was not expressed in malignant tumors of the prostate. As a result, p63 has been reported as a useful marker for differentiating benign from malignant lesions in the prostate. p63 has also been shown to be a sensitive marker.

Species: Mouse Monoclonal **Cat#:** Z2380 ›››

IHC: Human skin stained with ZM70



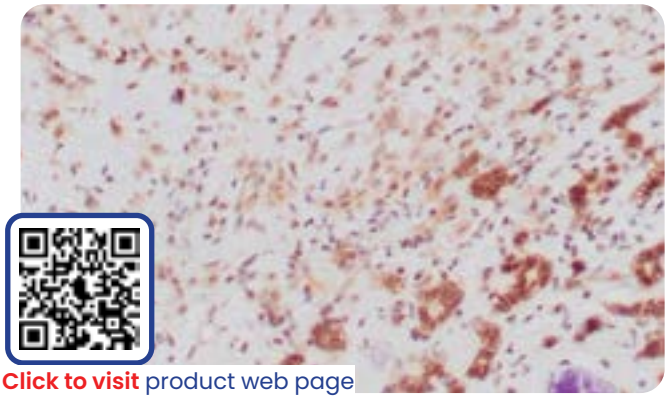
Click to visit product web page

p120 *(clone ZR316)*

Recombinant. ZR316 recognizes p120 catenin, a proliferation-associated nucleolar protein found in most human malignant tumors but not in resting normal cells. p120 catenin controls the tight junction barrier function. p120 catenin binds to the intracellular domain of E-cadherin. p120 catenin is a proliferation-associated nucleolar protein but not in resting normal cells. In colorectal cancer, the altered localization of p120 catenin corresponds with a loss of cytoplasmic epithelial cell adhesion. p120 catenin antibody predicts poor outcome in invasive breast cancer.

Species: Rabbit Monoclonal **Cat#:** Z2620 >>>

IHC: Human breast lobular carcinoma stained with ZR316



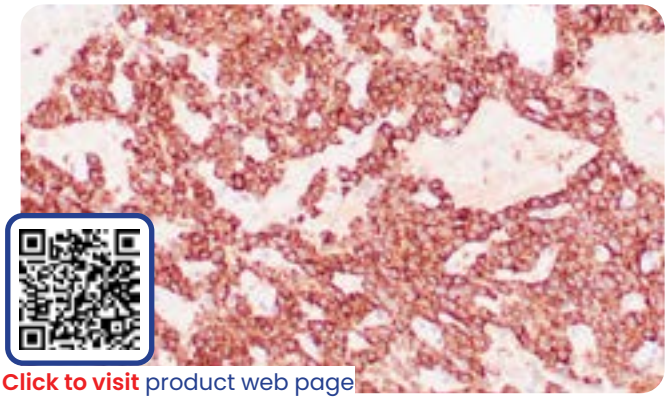
Click to visit product web page

Parathyroid Hormone *(PTH, clone ZM207)*

ZM207 recognizes Parathyroid Hormone (PTH), a hormone that the parathyroid glands release to control the level of calcium in blood and which helps control the levels of phosphorus and vitamin D in blood and bones. Parathyroid Hormone (PTH) is produced in the parathyroid gland as an 84 amino acid single chain polypeptide. Defects in the Parathyroid Hormone (PTH) gene are a cause of familial isolated hypoparathyroidism, which is also called autosomal dominant hypoparathyroidism or autosomal dominant hypocalcemia.

Species: Mouse Monoclonal **Cat#:** Z2378 >>>

IHC: Human parathyroid gland stained with ZM207



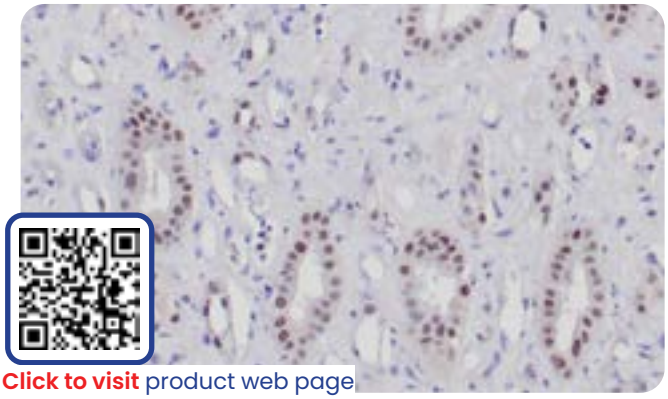
Click to visit product web page

PAX-2 *(clone ZR224)*

Recombinant. ZR224 recognizes a 42kDa protein, a member of the paired box family of transcription factors, which is required for the development and proliferation of the kidney, brain, and Mullerian organs. PAX-2 has been used as a marker for the identification of renal cell carcinoma and ovarian carcinoma by immunohistochemistry. PAX-2 expression is suppressed through promoter methylation in late embryonic development but is reactivated during renal regeneration. PAX-2 has nuclear localization and is expressed in the developing central nervous system, eye, ear, and urogenital tract.

Species: Rabbit Monoclonal **Cat#:** Z2741 >>>

IHC: Human normal kidney stained with ZR224



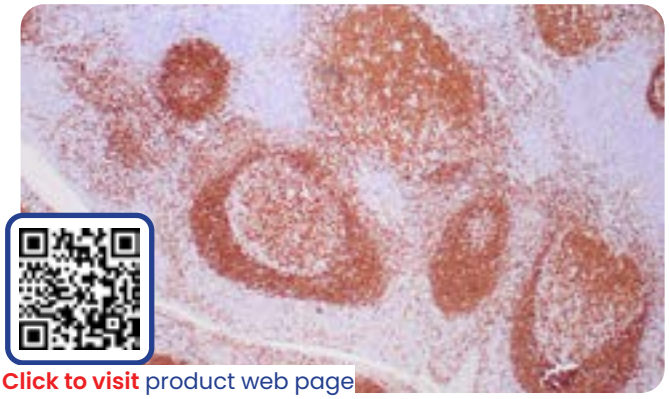
Click to visit product web page

PAX-5 *(clone ZR268)*

Recombinant. ZR268 recognizes PAX-5, a member of the paired box (PAX) family of transcription factors. PAX-5 and the other PAX proteins are important regulators in early development, and alterations in the expression of their genes are thought to contribute to neoplastic transformation. The central feature of PAX-5 and the PAX gene family is a novel, highly conserved DNA-binding domain, known as the paired box. The PAX-5 gene encodes the B-cell lineage specific activator protein (BSAP) that is expressed early.

Species: Rabbit Monoclonal **Cat#:** Z2582 >>>

IHC: Human tonsil stained with ZR268



Click to visit product web page

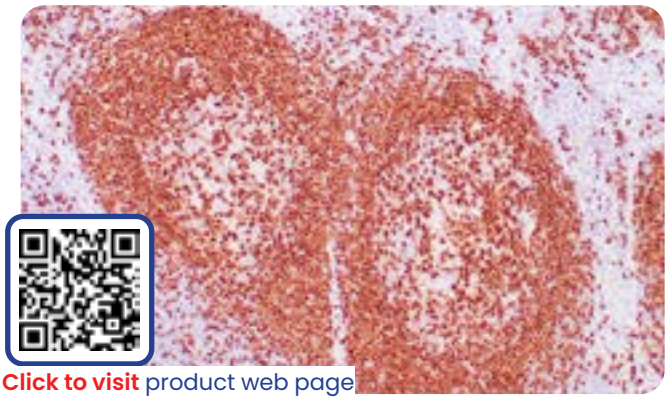
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

PAX-5 *(clone ZM26)*

ZM26 recognizes PAX-5, a member of the paired box (PAX) family of transcription factors. PAX-5 and the other PAX proteins are important regulators in early development, and alterations in the expression of their genes are thought to contribute to neoplastic transformation. The central feature of PAX-5 and the PAX gene family is a novel, highly conserved DNA-binding domain, known as the paired box. The PAX-5 gene encodes the B-cell lineage specific activator protein (BSAP) that is expressed at early development stages.

Species: Mouse Monoclonal **Cat#:** Z2354 ›››

IHC: Human lymph node stained with ZM26



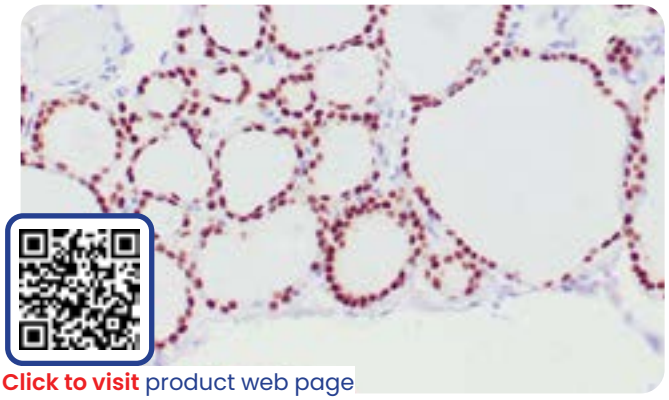
Click to visit product web page

PAX-8 *(clone ZR1)*

Recombinant. ZR1 recognizes PAX-8, which is expressed in the thyroid, non-ciliated mucosal cells of the fallopian tubes and simple ovarian inclusion cysts, but not normal ovarian surface epithelial cells. PAX-8 is expressed in ovarian serous, endometrioid, and clear cell carcinomas, but only rarely in primary ovarian mucinous adenocarcinomas. Over 98% of clear cell RCCs, 90% of papillary RCCs, and 90% of oncocytomas were positive for PAX-8. ZR1 rabbit monoclonal antibody does not react with pancreatic neuroendocrine tumors, thymic tumors, and lymphocytes.

Species: Rabbit Monoclonal **Cat#:** Z2202 ›››

IHC: Human thyroid gland stained with ZR1



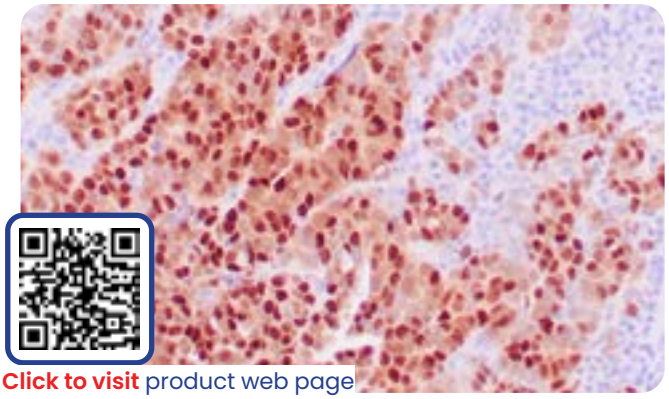
Click to visit product web page

PAX-8 *(clone ZM28)*

ZM28 recognizes PAX-8, a member of the paired box (PAX) family of transcription factors. PAX-8 is a protein of 62kDa. The PAX-8 nuclear protein is involved in thyroid follicular cell development and expression of thyroid-specific genes. Mutations in the PAX-8 gene have been associated with thyroid dysgenesis, thyroid follicular carcinomas, and atypical thyroid adenomas. PAX-8 is expressed in the thyroid (and associated carcinomas), non-ciliated mucosal cells of the fallopian tubes, and simple ovarian inclusion cysts.

Species: Mouse Monoclonal **Cat#:** Z2357 ›››

IHC: Human thyroid carcinoma stained with ZM28



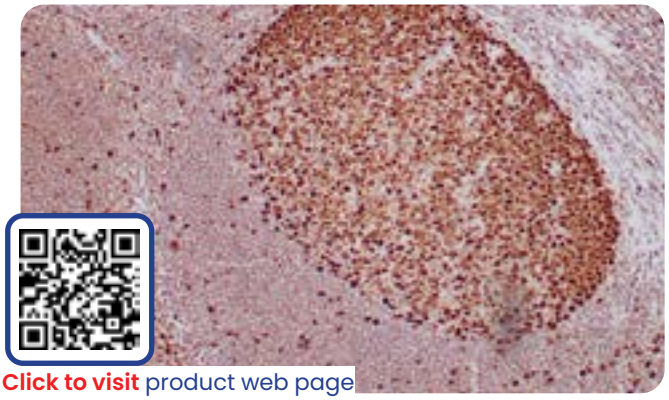
Click to visit product web page

PCNA *(clone ZR378)*

Recombinant. ZR378 recognizes PCNA (Proliferating Cell Nuclear Antigen), a nuclear protein with a role in DNA synthesis, DNA repair, and cell cycle progression. PCNA expression correlates with proliferation activity. PCNA is a non-histone protein of 36kDa which is also known as cyclin or polymerase delta auxiliary protein. PCNA coordinates synthesis of both leading and lagging strands of the replication fork during DNA replication. Elevated expression of PCNA has been shown in the nucleus during the late G1 phase immediately before the onset of DNA synthesis.

Species: Rabbit Monoclonal **Cat#:** Z2669 ›››

IHC: Human tonsil stained with ZR378



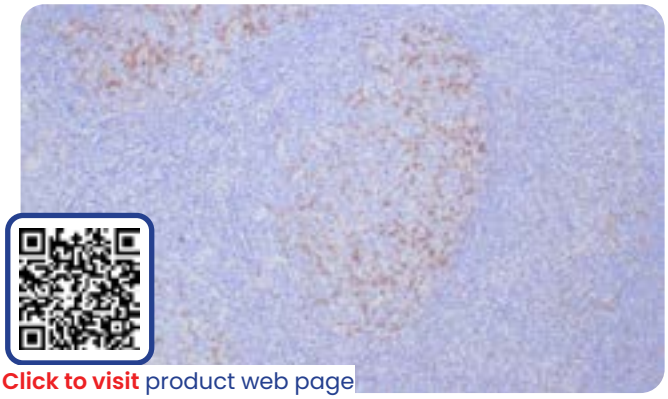
Click to visit product web page

PD-1 (PDCD1, clone ZR408)

Recombinant. PD-1 (PDCD1) is expressed on activated T-cells, B-cells, and myeloid cells. Zeta's antibody to PD-1 (PDCD-1) is a marker of angioimmunoblastic lymphoma and suggests a unique cell of origin for this neoplasm. Unlike CD10 and BCL6, PD-1 (PDCD-1) is expressed by few B-cells, so the antibody to PD-1 (PDCD-1) may be a more specific and valuable diagnostic marker in angioimmunoblastic lymphoma. In addition, PD-1 (PDCD-1) expression provides evidence that angioimmunoblastic lymphoma is a neoplasm derived from germinal center-associated T-cells. >>>

Species: Rabbit Monoclonal **Cat#:** Z2764

IHC: Human tonsil stained with ZR408



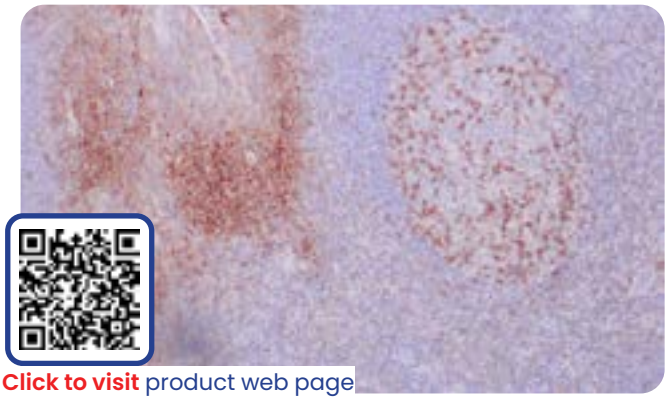
Click to visit product web page

PD-1 (PDCD1, clone ZM357)

Recombinant. ZM357 recognizes PD-1 / PDCD-1 protein, designated CD279, a type I transmembrane receptor and a member of the immunoglobulin gene superfamily. PD-1/PDCD-1 is expressed on activated T-cells, B-cells, and myeloid cells. This antibody is a marker of lymphoma and suggests a unique cell of origin for the neoplasm. Unlike CD10 and BCL6, PD-1/PDCD-1 is expressed by T-cells, so the PD-1/PDCD-1 antibody may be a more specific and valuable diagnostic marker in angioimmunoblastic lymphoma.

Species: Mouse Monoclonal **Cat#:** Z2424 >>>

IHC: Human tonsil stained with ZM357



Click to visit product web page

PD-L1 (clone ZR3)

Recombinant. ZR3 recognizes PD-L1 (Programmed cell death ligand 1), a protein that is overexpressed in human tumors including melanoma, diffuse large B-cell lymphoma, and carcinomas of the lung, bladder, breast, kidney, and colon. Zeta's PD-L1 antibody (clone ZR3) specifically binds PD-L1, also known as Cluster of Differentiation 274 (CD274) or B7 homolog 1 (B7-H1). PD-L1 is a type 1 transmembrane protein involved in the regulation of cellular and humoral immune responses.

Species: Rabbit Monoclonal **Cat#:** Z2002 >>>

IHC: Human lung squamous cell carcinoma stained with ZR3

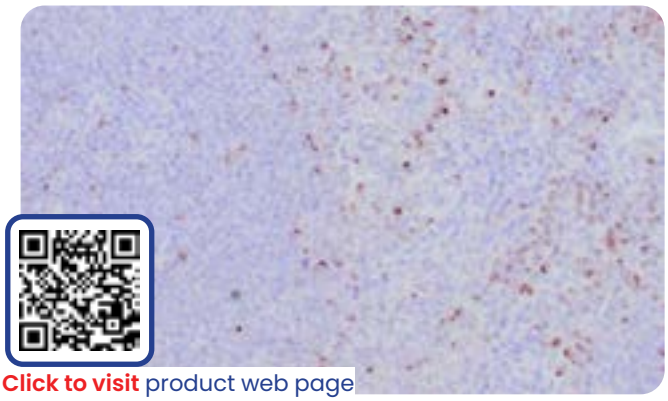
Click to visit product web page

Perforin (clone ZR270)

Recombinant. ZR270 recognizes Perforin, a glycoprotein responsible for pore formation in cell membranes, where Perforin is able to polymerize and form a channel in the cell membrane. Polymerized Perforin molecules form channels enabling free, non-selective, passive transport of ions, water, small-molecule substances and enzymes. Perforin, a protein found within cytoplasmic granules, is a marker of cytotoxic lymphocytes. It is frequently positive, along with granzyme B, in extra-nodal natural killer (NK) cell lymphomas.

Species: Rabbit Monoclonal **Cat#:** Z2584 >>>

IHC: Human spleen stained with ZR270



Click to visit product web page

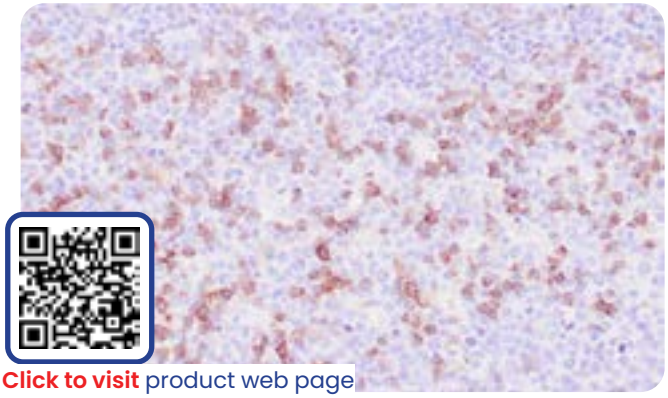
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

Perforin (clone ZM159)

Recombinant. ZM159 recognizes Perforin, a glycoprotein responsible for pore formation in cell membranes, where Perforin is able to polymerize and form a channel in the cell membrane. Polymerized Perforin molecules form channels enabling free, non-selective, passive transport of ions, water, small-molecule substances and enzymes. Perforin, a protein found within cytoplasmic granules, is a marker of cytotoxic lymphocytes. It is frequently positive, along with granzyme B, in extra-nodal natural killer (NK) cell lymphomas.

Species: Mouse Monoclonal **Cat#:** Z2472 ›››

IHC: Human spleen stained with ZM159



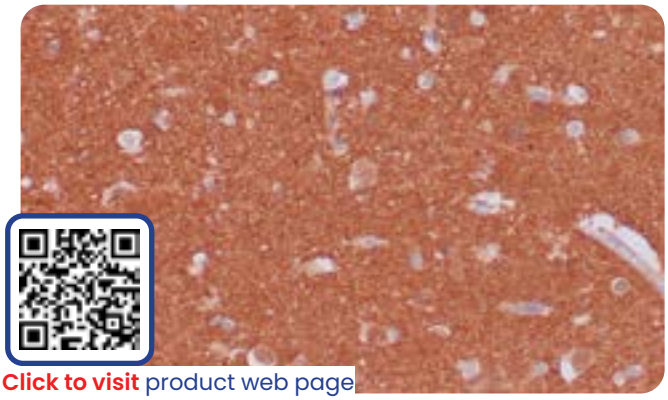
Click to visit product web page

PGP9.5 (clone ZR401)

Recombinant. ZR401 recognizes PGP9.5, a soluble protein of 20-30kDa, also known as ubiquitin carboxyl-terminal hydrolase-1 (UCH-L1). Immunostaining for PGP9.5 has been shown in a wide variety of mesenchymal neoplasms. A mutation in PGP9.5 gene is believed to cause a form of Parkinson's disease. PGP 9.5 was isolated from brain and is a general marker for neuronal and neuroendocrine tissue. Before the discovery of PGP9.5, neurone specific enolase (NSE) has been the only general marker.

Species: Rabbit Monoclonal **Cat#:** Z2757 ›››

IHC: Formalin-fixed and paraffin-embedded human brain stained with ZR401



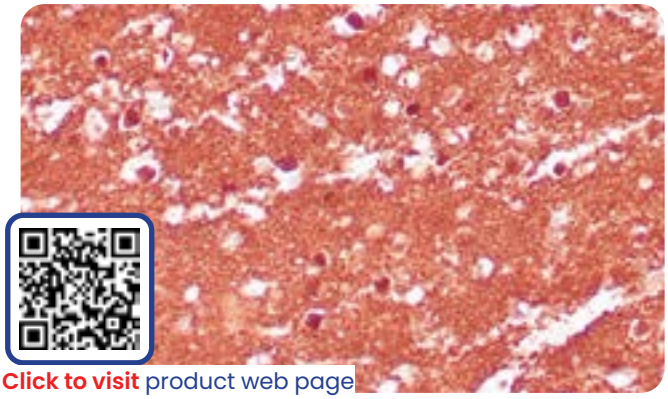
Click to visit product web page

PGP9.5 (clone ZM160)

ZM160 recognizes PGP9.5, a soluble protein of 20-30kDa, also known as ubiquitin carboxyl-terminal hydrolase-1 (UCH-L1). Immunostaining for PGP9.5 has been shown in a wide variety of mesenchymal neoplasms. A mutation in PGP9.5 gene is believed to cause a form of Parkinson's disease. PGP 9.5 was isolated from brain and is a general marker for neuronal and neuroendocrine tissue. Before the discovery of PGP9.5, neurone specific enolase (NSE) has been the only general marker.

Species: Mouse Monoclonal **Cat#:** Z2473 ›››

IHC: Human cerebellum stained with ZM160



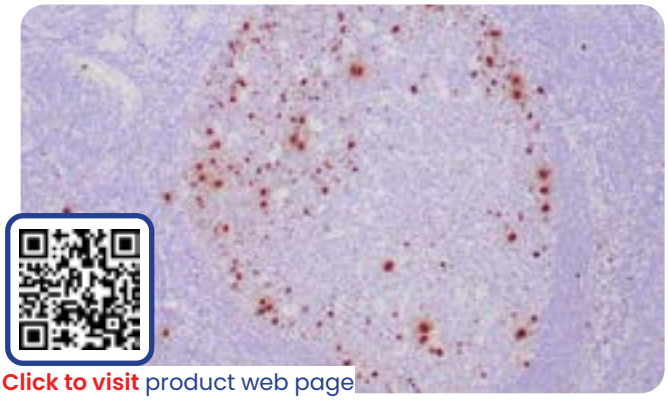
Click to visit product web page

PHH3 (clone ZR285)

ZR285 recognizes PHH3. Phosphohistone H3 (PHH3) is a marker specific for cells undergoing mitosis. When Serine 10 of Histone H3 is phosphorylated is associated with mitotic chromatin condensation in late G2 and M phase of the cell cycle. PHH3 can distinguish mitosis from apoptotic nuclei. The range percentage PHH3 positive tumor nuclei is from 0.0% to 5.6% (median value 0.8%). Increased expression of PHH3 was significantly associated with tumor thickness ($p = 0.031$).

Species: Rabbit Monoclonal **Cat#:** Z2600 ›››

IHC: Human tonsil stained with ZR285



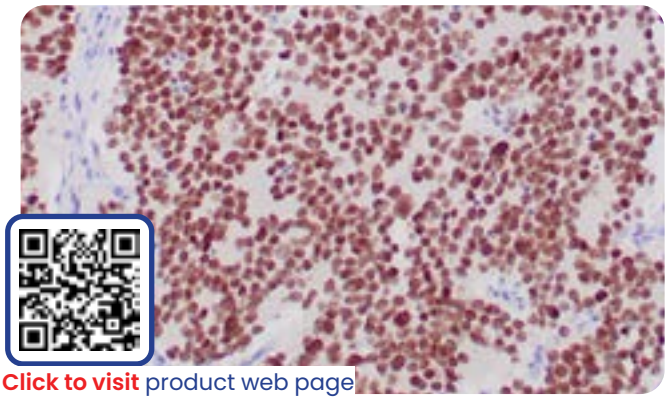
Click to visit product web page

PHOX2B (clone ZR292)

Recombinant. ZR292 recognizes PHOX2B (Paired homeobox protein 2B), a transcription factor located on chromosome 4p13, which is essential for forming autonomic ganglia in the autonomic nervous system. PHOX2B is expressed in neuroblastoma (NB), brain, and adrenal glands. PHOX2B deficiency can lead to susceptibility to congenital central hypoventilation syndrome (CCHS) and neuroblastoma type 2 (NBLST2). PHOX2B is a gene essential in the development of the autonomic nervous system. PHOX2B is a useful marker of neuroblastoma.

Species: Rabbit Monoclonal **Cat#:** Z2730 >>>

IHC: Human neuroblastoma stained with ZR292



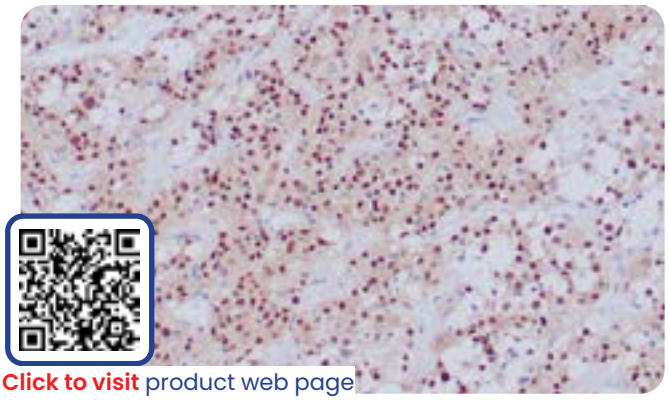
Click to visit product web page

PIT-1/POU1F1 (clone ZR440)

Recombinant. ZR440 recognizes PIT-1/POU1F1, known as growth hormone factor-1 (GHF-1), a member of the POU homeodomain family, is essential for the normal development of the anterior pituitary gland, where it is required to form somatotropes, lactotropes, and thyrotropes. Transcriptional regulators play a critical role in development by mediating tissue- and cell-specific transcription. POU domain factors are transcriptional regulators characterized by a bipartite DNA binding domain consisting of two highly conserved regions.

Species: Rabbit Monoclonal **Cat#:** Z2796 >>>

IHC: Human pituitary stained with ZR440



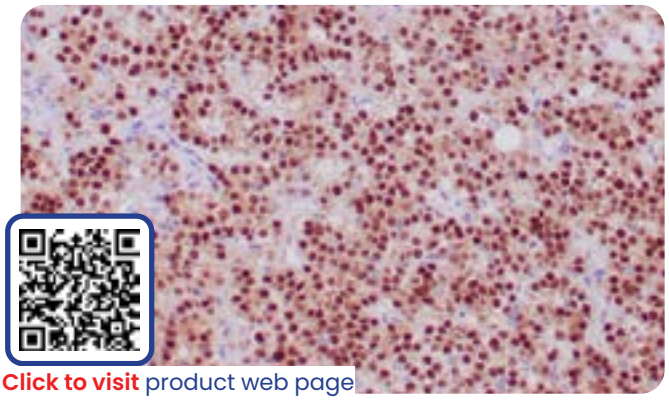
Click to visit product web page

PIT-1/POU1F1 (clone ZM385)

Recombinant. ZR385 recognizes PIT-1/POU1F1. Transcriptional regulator PIT-1/POU1F1 plays a critical role in development by mediating tissue- and cell-specific transcription. POU domain factors are transcriptional regulators characterized by a bipartite DNA binding domain consisting of two highly conserved regions, tethered by a variable linker of 14-26 amino acids. PIT-1 is essential for the normal development of the anterior pituitary gland, where it is required to form somatotropes, lactotropes, and thyrotropes.

Species: Mouse Monoclonal **Cat#:** Z2676 >>>

IHC: Human pituitary stained with ZM385



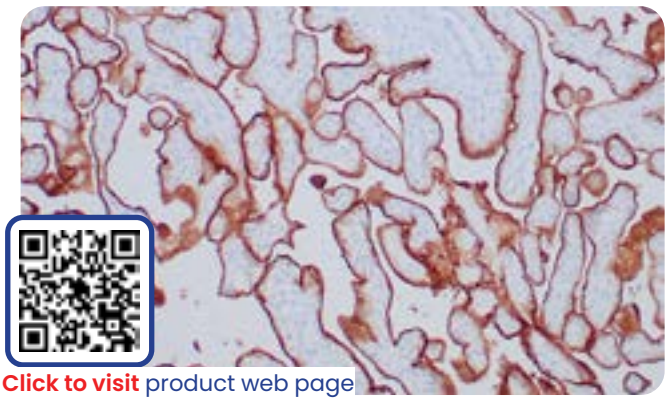
Click to visit product web page

PLAP (clone ZR441)

Recombinant. ZR441 recognizes Placental Alkaline Phosphatase (PLAP), a 70kDa membrane-bound isozyme (Regan and Nagao type) which is expressed in the placenta during the 3rd trimester of gestation. PLAP activity is highly specific and shows no cross-reaction with other isozymes of alkaline phosphatase. PLAP reacts with germ cell tumors and can discriminate between these and other neoplasms. Somatic neoplasms including breast, gastrointestinal, prostate, and urinary cancers may also immunoreact with the PLAP antibody.

Species: Rabbit Monoclonal **Cat#:** Z2797 >>>

IHC: Human placenta stained with ZR441



Click to visit product web page

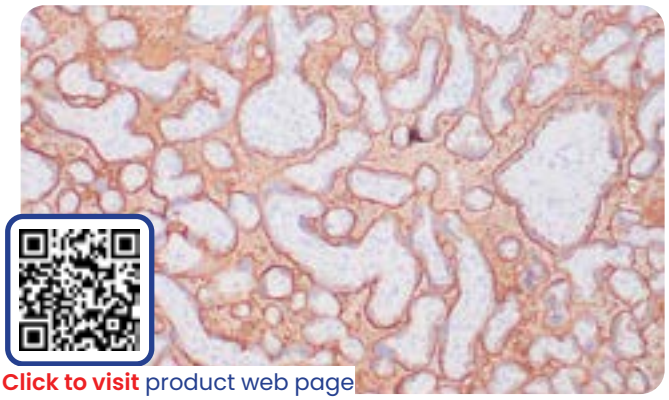
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

PLAP *(clone ZM161)*

ZM161 recognizes Placental Alkaline Phosphatase (PLAP), which is expressed in the placenta during the 3rd trimester of gestation. This antibody recognizes a 70kDa membrane-bound isozyme (Regan and Nagao type). PLAP activity is highly specific and shows no cross-reaction with other isozymes of alkaline phosphatase. PLAP reacts with germ cell tumors and can discriminate between these and other neoplasms. Somatic neoplasms including breast, gastrointestinal, prostate, and urinary cancers may also immunoreact with this PLAP antibody.

Species: Mouse Monoclonal **Cat#:** Z2474 ›››

IHC: Human placenta stained with ZM161



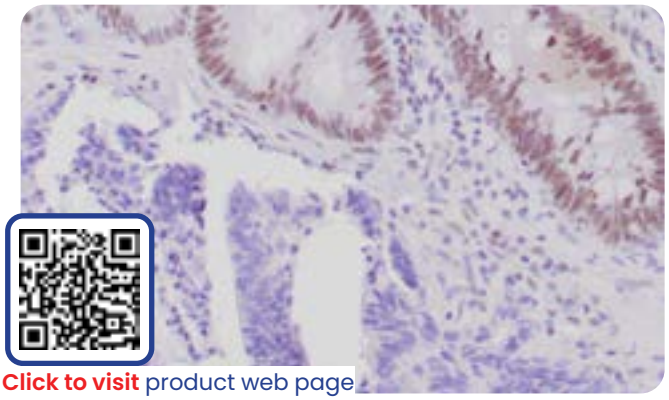
Click to visit product web page

PMS-2 *(clone ZR317)*

Recombinant. ZR317 recognizes PMS-2, a tumor suppressor protein involved in mismatch repair. PMS-2 forms a heterodimer with MLH1 and this complex interacts with other proteins to repair mismatched bases. Defects in PMS-2 are the cause of hereditary non-polyposis colorectal cancer type 4 (HNPCC4). Mutations in more than one gene family of PMS-2 or MLH1 can be involved alone or in combination in the production of the HNPCC phenotype (also called Lynch syndrome.

Species: Rabbit Monoclonal **Cat#:** Z2621 ›››

IHC: Human colon adenocarcinoma (Lynch Syndrome) stained with ZR317



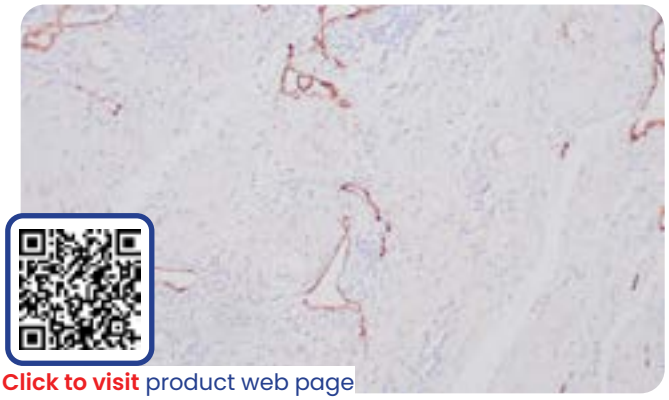
Click to visit product web page

Podoplanin *(clone ZR442)*

Recombinant. ZR442 recognizes Podoplanin (PDPN), a regulator of the lymphatic endothelium, podoplanin plays a role in maintaining the unique shape of podocytes. The Podoplanin antibody recognizes a mucic-protein of 38-43kDa located in stromal cells of peripheral lymphoid tissue and thymic epithelial cells. Podoplanin is selectively expressed in lymphatic endothelium as well as lymphangiomas, Kaposi sarcomas, and in a subset of angiosarcomas with probable lymphatic differentiation. Recent studies have also shown podoplanin to be a highly sensitive marker.

Species: Rabbit Monoclonal **Cat#:** Z2798 ›››

IHC: Human testicle stained with ZR442



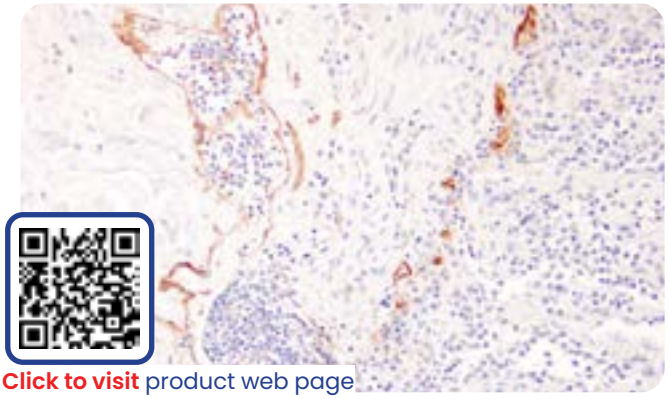
Click to visit product web page

Podoplanin *(clone ZM31)*

ZM31 recognizes Podoplanin (PDPN), a regulator of the lymphatic endothelium, podoplanin plays a role in maintaining the unique shape of podocytes. The Podoplanin antibody recognizes a mucic-protein of 38-43kDa located in stromal cells of peripheral lymphoid tissue and thymic epithelial cells. Podoplanin is selectively expressed in lymphatic endothelium as well as lymphangiomas, Kaposi sarcomas, and in a subset of angiosarcomas with probable lymphatic differentiation. Recent studies have also shown podoplanin to be a highly sensitive marker.

Species: Mouse Monoclonal **Cat#:** Z2338 ›››

IHC: Human lymph node stained with ZM31



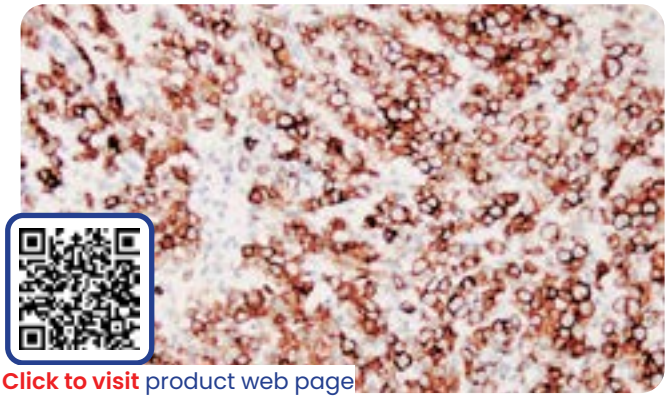
Click to visit product web page

Podoplanin (clone D2-40)

D2-40 recognizes Podoplanin (PDPN), a regulator of the lymphatic endothelium, podoplanin plays a role in maintaining the unique shape of podocytes. The Podoplanin antibody recognizes a mucic-protein of 38-43kDa located in stromal cells of peripheral lymphoid tissue and thymic epithelial cells. Podoplanin is selectively expressed in lymphatic endothelium as well as lymphangiomas, Kaposi sarcomas, and in a subset of angiosarcomas with probable lymphatic differentiation. Recent studies have also shown podoplanin to be a highly sensitive marker.

Species: Mouse Monoclonal **Cat#:** Z2097 ›››

IHC: Human testicular seminoma stained with D2-40



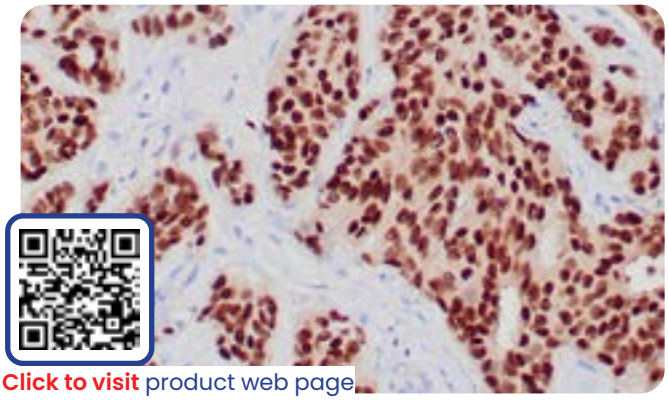
Click to visit product web page

PR (clone ZR290)

Recombinant. ZR290 recognizes PR (Progesterone Receptor), a receptor whose ligand is one of the central regulators of human reproduction, progesterone. In breast development, Progesterone is involved in the formation of lobular-alveolar structures and affects differentiation in the breast by modulation of milk protein synthesis. The cellular effects of Progesterone are mediated through progesterone receptors (PR). PR, a protein with 946 amino acids, is a ligand-activated transcription factor member of the steroid receptor superfamily.

Species: Rabbit Monoclonal **Cat#:** Z2728 ›››

IHC: Human breast carcinoma stained with ZR290



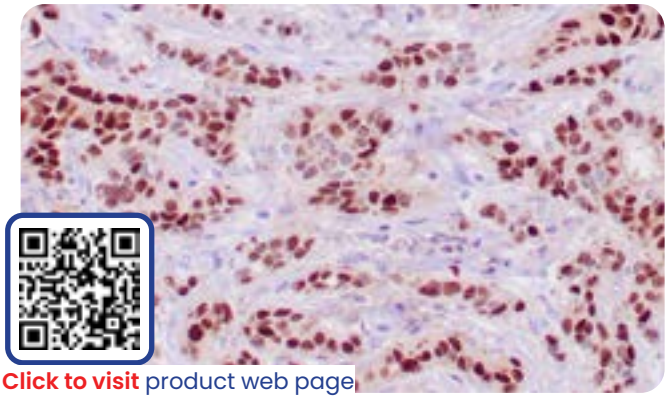
Click to visit product web page

PR (clone ZR4)

ZR4 recognizes PR (Progesterone Receptor), a receptor whose ligand is one of the central regulators of human reproduction, progesterone. In breast development, Progesterone is involved in the formation of lobular-alveolar structures and affects differentiation in the breast by modulation of milk protein synthesis. The cellular effects of Progesterone are mediated through progesterone receptors (PR). PR, a protein with 946 amino acids, is a ligand-activated transcription factor member of the steroid receptor superfamily of nuclear receptors.

Species: Rabbit Monoclonal **Cat#:** Z2023 ›››

IHC: Human breast carcinoma stained with ZR4



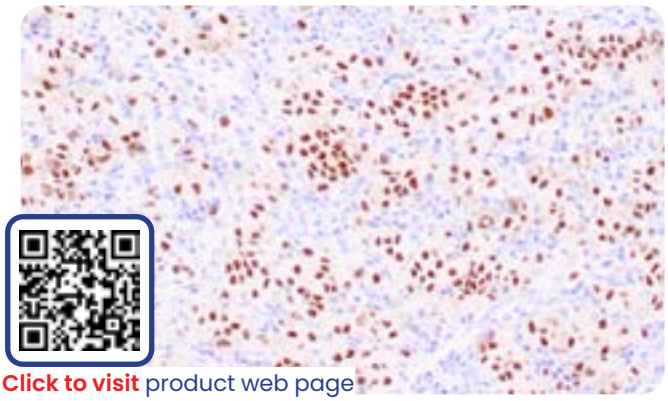
Click to visit product web page

PRAME (clone ZR383)

Recombinant. ZR383 recognizes PRAME (Preferentially expressed Antigen in Melanoma), a melanoma-associated antigen that was isolated from autologous T cells in a melanoma patient. The use of PRAME immunohistochemistry is well established for cutaneous melanocytic lesions. Over 85% of primary and metastatic melanoma (superficial spreading, nodular, and lentigo maligna) are positive for PRAME. Only about one third of cases of desmoplastic/spindle cell melanomas are positive for PRAME. Studies have shown that immunohistochemical analysis for PRAME expression is useful.

Species: Rabbit Monoclonal **Cat#:** Z2674 ›››

IHC: Human liver with metastatic melanoma stained with ZR383



Click to visit product web page

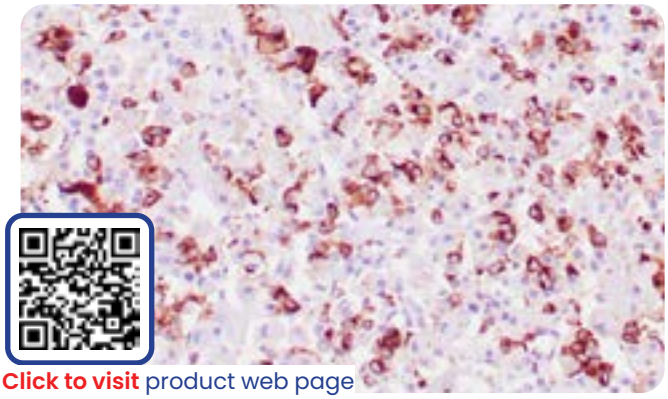
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

Prolactin *(clone ZM203)*

ZM203 recognizes Prolactin (PRL), a single-chain polypeptide of 199 amino acids that is secreted by the anterior pituitary and is involved in cell growth, reproduction, and immune function. The Prolactin antibody reacts with prolactin-producing cells and is a useful marker in classification of pituitary tumors and the study of pituitary diseases. Prolactin plays a role in the development of mammary cancer, functioning dually as a mitogen and a differentiating agent. Prolactin is a secreted hormone and growth regulator.

Species: Mouse Monoclonal **Cat#:** Z2523 ›››

IHC: Human pituitary gland stained with ZM203



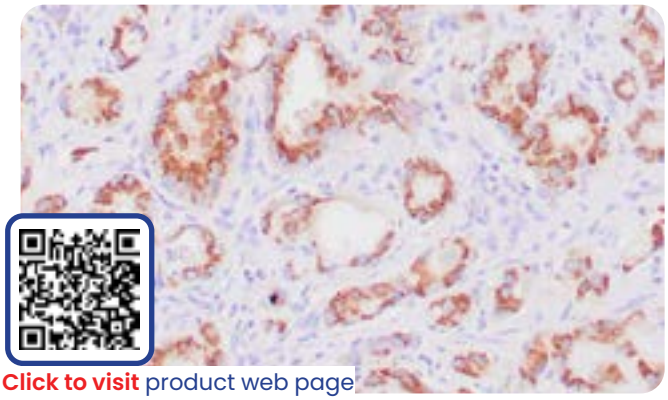
Click to visit product web page

Prostein *(P501S, clone ZR9)*

Recombinant. ZR9 recognizes Prostein, shown to be uniquely expressed in normal and cancerous prostatic tissues. By immunohistochemistry, Prostein is expressed in the vast majority of normal and malignant prostatic tissues, regardless of grade and metastatic status. No Prostein (P501S) protein expression is detected in normal and malignant tissue samples representing the great majority of essential tissues and tumors. Prostein is more specific and sensitive for prostatic carcinomas than PSA and PSAP.

Species: Rabbit Monoclonal **Cat#:** Z2006 ›››

IHC: Human prostatic tissue stained with ZR9



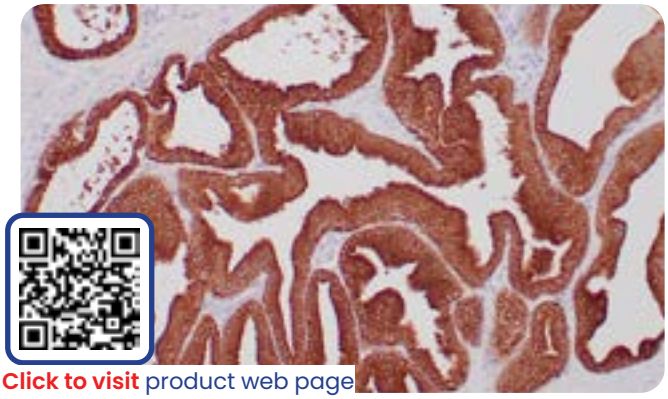
Click to visit product web page

PSA *(clone ZR232)*

Recombinant. ZR232 recognizes PSA, a serine protease produced almost exclusively by prostate epithelial cells. Prostate-specific antigen (PSA) is a single-chain glycoprotein of 237 amino acids containing approximately 8% carbohydrate. PSA is expressed in the highly specialized secretory epithelial layer of human and male secretory cells of the prostate gland and is readily demonstrated in adenocarcinomas of the prostate in about 95% of the cases. There is a correlation between malignancy grade and intensity of PSA staining.

Species: Rabbit Monoclonal **Cat#:** Z2710 ›››

IHC: Human prostate stained with ZR232



Click to visit product web page

PSAP *(clone ZR443)*

Recombinant. ZR443 recognizes PSAP, a protein of 100kDa identified as prostate specific acid phosphatase. PSAP is a marker for prostate cancer. PSAP is an enzyme that catalyzes the conversion of orthophosphoric monoester to alcohol and orthophosphate. PSAP is synthesized under androgen regulation and is secreted by the epithelial cells of the prostate gland. PSAP is found in non-neoplastic adult and fetal prostatic glands, primary and metastatic prostatic carcinomas. Zeta's PSAP antibody shows no staining in granulocytes or osteoclasts.

Species: Rabbit Monoclonal **Cat#:** Z2799 ›››

IHC: Human prostate stained with ZR443

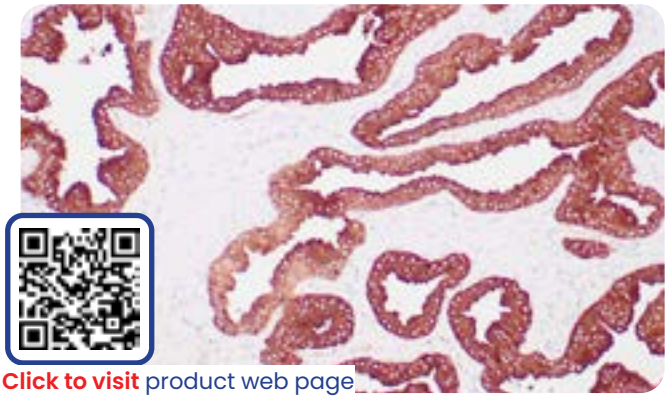
Click to visit product web page

PSAP *(clone ZM162)*

ZM162 recognizes PSAP, a protein of 100kDa identified as prostate specific acid phosphatase. PSAP is a marker for prostate cancer. PSAP is an enzyme that catalyzes the conversion of orthophosphoric monoester to alcohol and orthophosphate. PSAP is synthesized under androgen regulation and is secreted by the epithelial cells of the prostate gland. PSAP is found in non-neoplastic adult and fetal prostatic glands, primary and metastatic prostatic carcinomas. Zeta's PSAP antibody shows no staining in granulocytes or osteoclasts.

Species: Mouse Monoclonal **Cat#:** Z2475 ›››

IHC: Human prostate stained with ZM162



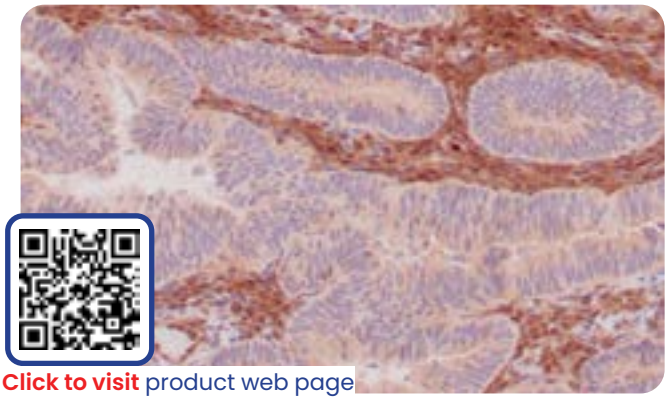
Click to visit product web page

PTEN *(clone ZR235)*

ZR235 recognizes PTEN, which is mutated in a large number of cancers, including appendix, brain, breast, endometrial, kidney, and prostate cancers. PTEN is one of the most commonly lost tumor suppressors in human cancer, acting as a negative regulator of the PI3K/AKT signaling pathway, where loss of PTEN activity causes an upregulation in the AKT pathway. PTEN (phosphatidylinositol-3,4,5-trisphosphate 3-phosphatase) contains a tensin-like domain as well as a catalytic domain.

Species: Rabbit Monoclonal **Cat#:** Z2711

IHC: Human endometrioid adenocarcinoma stained with ZR235 ›››



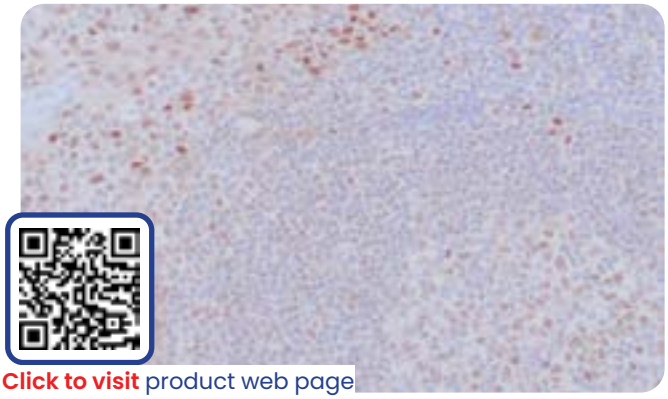
Click to visit product web page

Rb *(clone ZR444)*

Recombinant. ZR444 recognizes Retinoblastoma (Rb), a well-characterized tumor suppressor gene product. The Retinoblastoma (Rb) antibody recognizes the 105kDa phosphoprotein and shows no cross reaction with p107 or p130. The Rb antibody reacts with the hyper-phosphorylated as well as the un-phosphorylated form of the Rb protein. The Retinoblastoma gene product plays a key role in cell cycle control. Retinoblastoma has been identified as a tumor suppressor gene whose loss of function leads to tumor development.

Species: Rabbit Monoclonal **Cat#:** Z2800 ›››

IHC: Human tonsil stained with ZR444



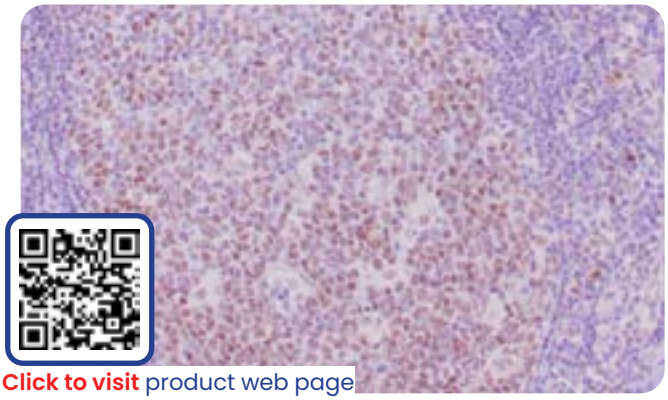
Click to visit product web page

Rb *(clone 1F8)*

Recombinant. 1F8 recognizes Retinoblastoma (Rb), a well-characterized tumor suppressor gene product. The Retinoblastoma (Rb) antibody recognizes the 105kDa phosphoprotein and shows no cross reaction with p107 or p130. The Rb antibody reacts with the hyper-phosphorylated as well as the un-phosphorylated form of the Rb protein. The Retinoblastoma gene product plays a key role in cell cycle control. Retinoblastoma has been identified as a tumor suppressor gene whose loss of function leads to tumor development.

Species: Mouse Monoclonal **Cat#:** Z2651 ›››

IHC: Human tonsil stained with 1F8



Click to visit product web page

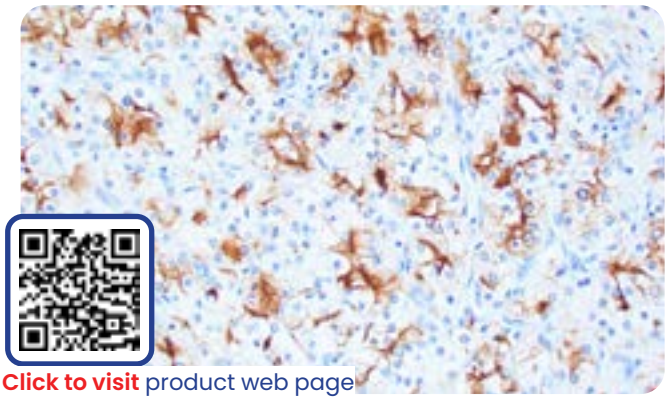
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

RCC *(clone 66.4.C2)*

66.4.C2 recognizes RCC (Renal Cell Carcinoma), a surface membrane molecule located on the brush border of proximal renal tubules and expressed on the luminal surface of Bowman capsular epithelial cells and coiled uriniferous tubules. The RCC antibody detects a 200 kDa glycoprotein (gp200). In normal kidney, RCC is localized along the brush border of the pars convoluta and pars recta segments of the proximal tubule, as well as focally along the luminal surface of Bowman's capsule.

Species: Mouse Monoclonal **Cat#:** Z2256

IHC: Human clear cell renal cell carcinoma stained with 66.4.C2 ›››



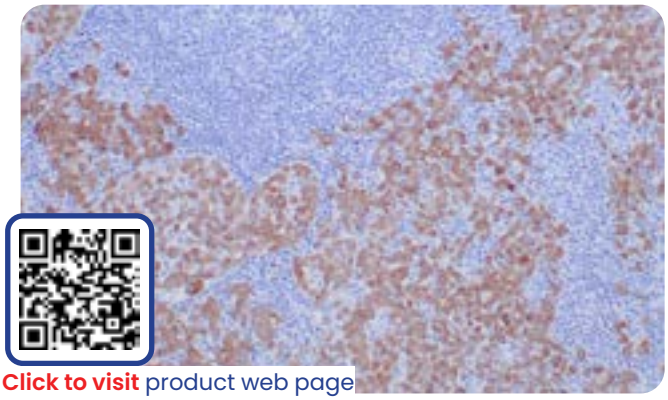
Click to visit product web page

ROS1 *(clone ZR400)*

Recombinant. ZR400 recognizes ROS1 (Repressor of Silencing 1), an orphan receptor tyrosine kinase of the insulin receptor family, which was initially identified as a homolog of v-ros from the UR2 sarcoma virus. ROS1 consists of a large extracellular domain composed of six fibronectin repeats, a transmembrane domain, and an intracellular kinase domain. While the function of ROS1 is undefined, it has been shown to play an essential role in the differentiation of epididymal epithelium.

Species: Rabbit Monoclonal **Cat#:** Z2756 ›››

IHC: Human node with metastatic lung adenocarcinoma stained with ZR400



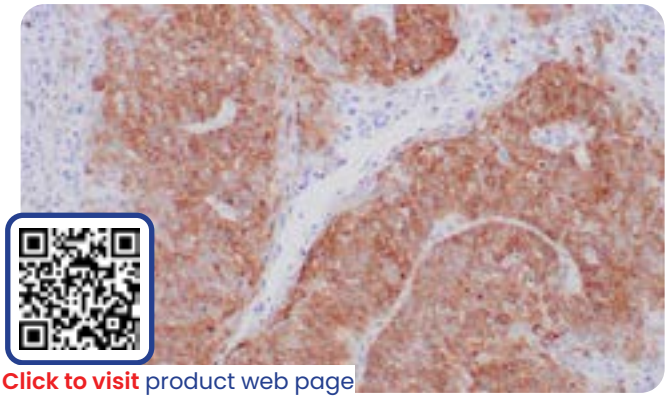
Click to visit product web page

RRM1 *(clone ZR114)*

Recombinant. ZR114 recognizes RRM1 (Ribonucleoside Reductase M1 polypeptide), which is involved in carcinogenesis and tumor progression of non-small cell lung cancer (NSCLC). RRM1 is one of two non-identical subunits for ribonucleoside-diphosphate reductase, an enzyme that catalyzes the biosynthesis of deoxyribonucleotides from the corresponding ribonucleotides. RRM1 provides the precursors necessary for DNA synthesis. RRM1 is present throughout the cell cycle but degraded in quiescent cells.

Species: Rabbit Monoclonal **C at#:** Z2418 ›››

IHC: Formalin-fixed and paraffin-embedded human head and neck small cell carcinoma stained with ZR114



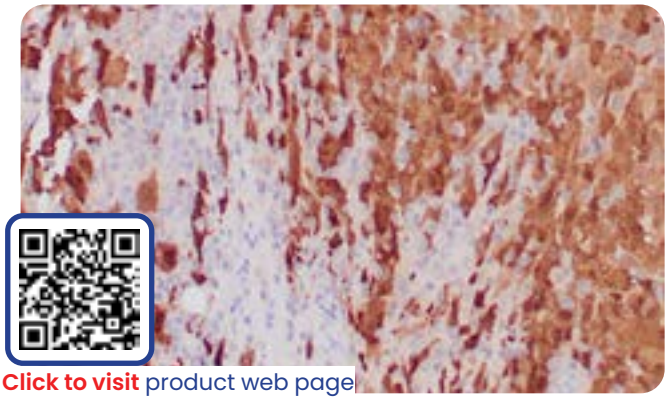
Click to visit product web page

S-100 *(clone 4C4.9)*

4C4.9 recognizes S-100, which belongs to the family of calcium binding proteins such as calmodulin and troponin C. S-100A is composed of an alpha and beta chain whereas S-100B is composed of two beta chains. The S-100 protein is mainly present in the antigen presenting cells such as the Langerhans cells in skin and interdigitating reticulum cells in the paracortex of lymph nodes. The S-100 antibody stains Schwannomas, ependymomas, astrocytomas.

Species: Mouse Monoclonal **Cat#:** Z2055 ›››

IHC: Human melanoma stained with 4C4.9



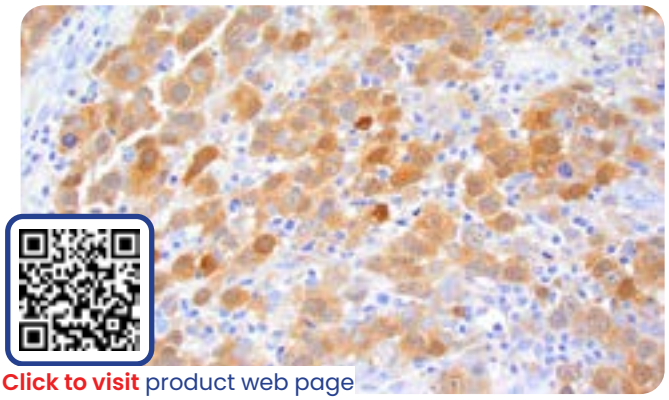
Click to visit product web page

S100B *(clone ZR379)*

Recombinant. ZR379 recognizes S100A, a protein that belongs to the EF-hand calcium binding proteins and is found primarily in astrocytes in the central nervous system (CNS). S100A has a variety of functions, including calcium homeostasis, cell proliferation, differentiation, migration, and survival, as well as neurite outgrowth and regeneration. S100A is one of ten family members that belong to the S100 family of calcium binding proteins. S100A is composed of an alpha and a beta chain.

Species: Rabbit Monoclonal **Cat#:** Z2670 ›››

IHC: Human melanoma stained with ZR379



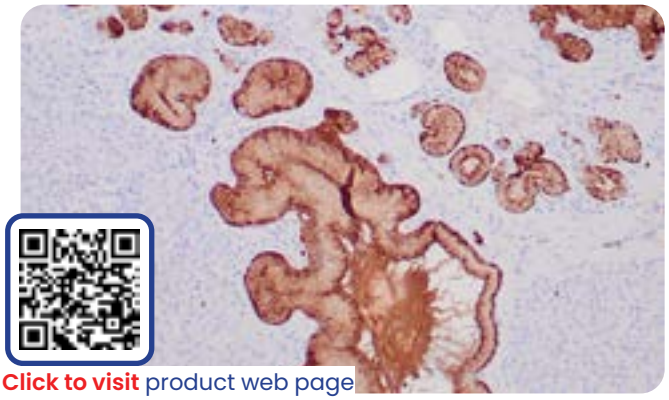
Click to visit product web page

S100P *(clone ZR115)*

Recombinant. ZR115 recognizes S100P, a member of the S100 family of proteins, and may initiate carcinogenesis in some epithelial tumors. Intercellular S100P interacts with ezrin, and extracellular S100P activates the receptor for advanced glycation end products. S100P highly expressed in human placenta, gastrointestinal tract, and esophageal mucosa, but always negative in pancreas and liver. Overexpression of S100P has been detected in several cancers such as breast, colon, prostate, pancreatic, and lung carcinomas.

Species: Rabbit Monoclonal **Cat#:** Z2419 ›››

IHC: Human pancreatic ductal carcinoma stained with ZR115



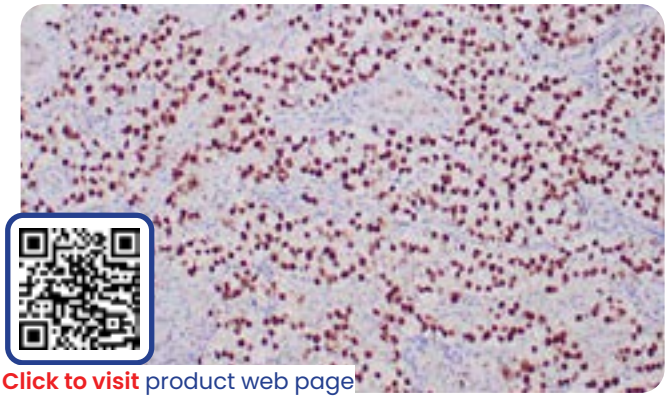
Click to visit product web page

SALL4 *(clone ZR276)*

Recombinant. ZR276 recognizes SALL4 (SALL4, spalt-like 4), a protein involved in maintenance of embryonic stem cell pluripotency, a malignant germ cell tumor marker, and a novel oncogene implicated in the initiation and progression of cancers. SALL4 is one of four members of the SALL (spalt-like, sal) family of transcription factors, mammalian homologs of the Drosophila region-specific homeotic gene spalt, which encodes a zinc finger-containing transcription regulator.

Species: Rabbit Monoclonal **Cat#:** Z2726 ›››

IHC: Human seminoma stained with ZR276



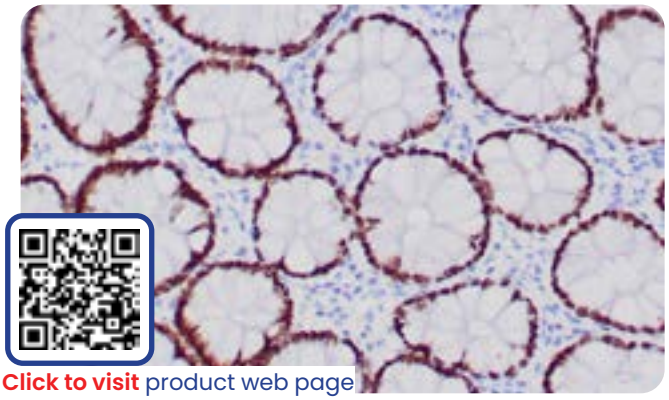
Click to visit product web page

SATB2 *(clone ZR167)*

Recombinant. ZR167 recognizes SATB2, a DNA binding protein specifically binds nuclear matrix attachment regions. SATB2 are part of the matrix attachment region binding transcription factor family, which consists of transcription factors binding to adenine and thymine (AT) rich regions in the nuclear matrix, capable of altering the chromatin structure. SATB2 is involved in transcription regulation and chromatin remodeling. SATB2 was first identified in 2002 and characterized as a gene involved in cleft palate defects.

Species: Rabbit Monoclonal **Cat#:** Z2479 ›››

IHC: Human colon stained with ZR167



Click to visit product web page

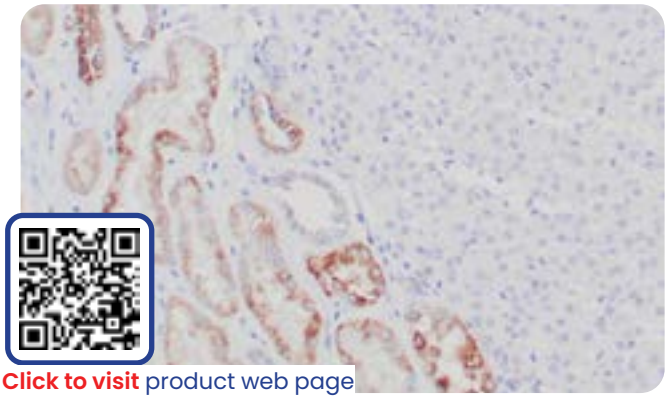
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

SDHB *(clone ZR339)*

Recombinant. ZR339 recognizes SDHB (Succinate dehydrogenase B), an iron-sulfur subunit of mitochondrial complex II. A vital component of the citric acid cycle and the electron transport chain, a respiratory complex that catalyzes the oxidation of succinate in the mitochondrial membrane. Many cancers are generally positive for SDHB, including renal cell carcinomas and gastrointestinal stromal tumors. Additionally SDHB mutations are associated with a subset of RCC and GIST tumors.

Species: Rabbit Monoclonal **Cat#:** Z2645 ›››

IHC: succinate dehydrogenase deficient RCC stained with ZR339



Click to visit product web page

Smoothelin *(clone ZR169)*

Recombinant. ZR169 recognizes Smoothelin, which is found exclusively in contractile smooth muscle cells. Smoothelin associates with stress fibers and constitutes part of the cytoskeleton. Smoothelin expression is limited to large veins and arteries capable of pulsatile contraction in the vascular system. As a marker for the highly differentiated contractile smooth muscle cell, smoothelin expression helps study vascular malformations and injury. Smoothelin is a constituent of the smooth muscle cell cytoskeleton protein.

Species: Rabbit Monoclonal **Cat#:** Z2465 ›››

IHC: Human colon stained with ZR169

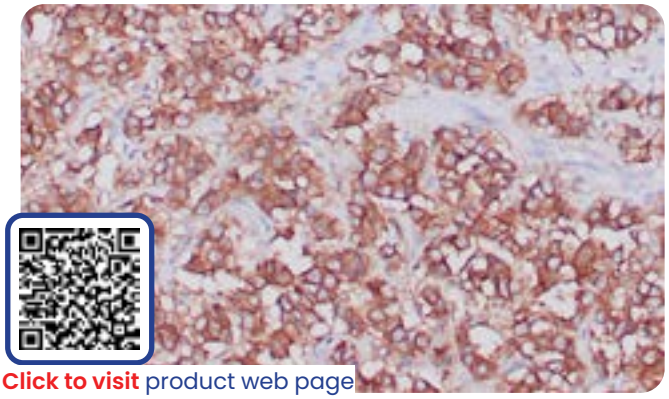
Click to visit product web page

Somatostatin Receptor Type 2 *(SSTR2) (clone ZR233)*

Recombinant. ZR233 recognizes Somatostatin Receptor 2 (SSTR2), a protein expressed in the secretory cells of the pancreas and the neurons of the central nervous system. Somatostatin (SSTR2) is overexpressed in neuroendocrine tumors. Somatostatin (SSTR2) expression can also play a role in guiding imaging studies and treatment choice. Somatostatin Receptor 2 (SSTR2) expression has been well demonstrated in most gastroenteropancreatic neuroendocrine tumors, with the exception of rectal neuroendocrine tumors.

Species: Rabbit Monoclonal **Cat#:** Z2712 ›››

IHC: Human neuroendocrine tumor stained with ZR233



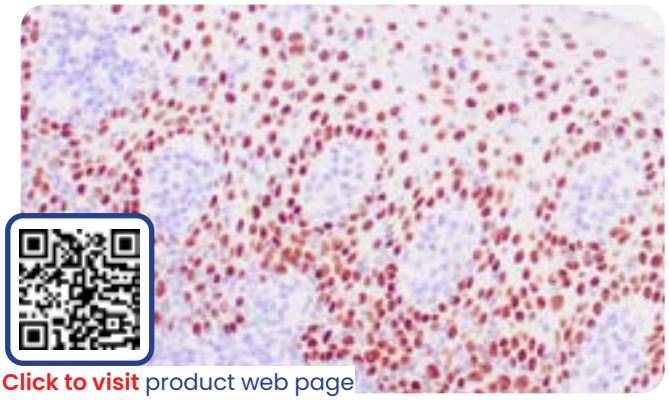
Click to visit product web page

SOX-2 *(clone ZM57)*

Recombinant. ZM57 recognizes SOX-2 (SRY (sex determining region Y)-box 2), a member of the SRY-related HMG-box (SOX) family of transcription factors involved in the regulation of embryonic development and in the determination of cell fate. SOX-2 is required for stem cell maintenance in the central nervous system, and also regulates gene expression in the stomach. SOX-2 is necessary for regulating multiple transcription factors that affect Oct3/4 expression. An essential function of SOX-2 is to stabilize embryonic stem cells in a pluripotent state.

Species: Mouse Monoclonal **Cat#:** Z2367 ›››

IHC: Human skin stained with ZM57



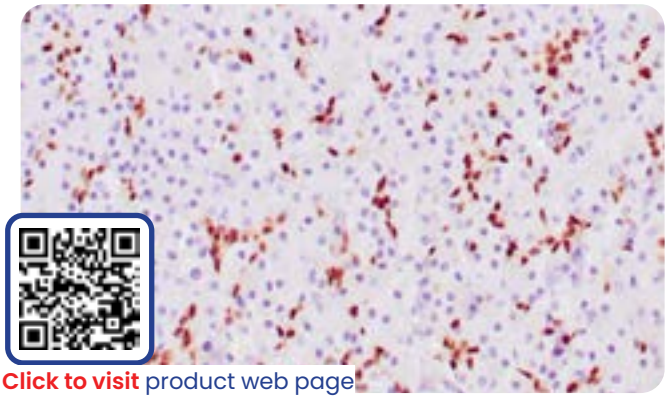
Click to visit product web page

SOX-9 *(clone ZM171)*

ZM171 recognizes SOX-9. SOX genes comprise a family of genes that are related to the mammalian sex-determining gene SRY. These genes similarly contain sequences that encode for the HMG-box domain, which is responsible for the sequence-specific DNA-binding activity. Sox genes encode putative transcriptional regulators involved in the decision of cell fates during development and the control of diverse developmental processes. SOX9 plays an important role in the normal skeletal development.

Species: Mouse Monoclonal **Cat#:** Z2483 ›››

IHC: Human panceas stained with ZM171



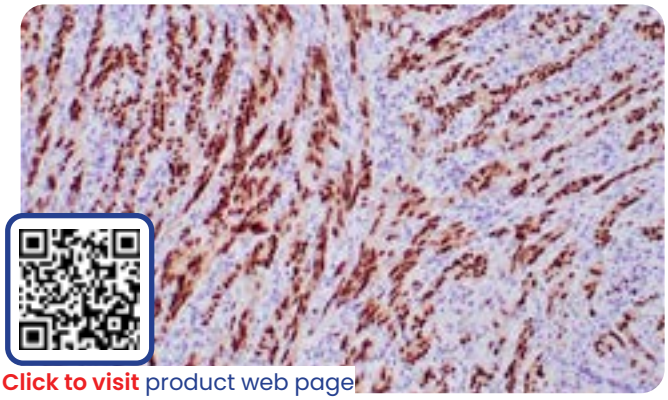
Click to visit product web page

SOX-10 *(clone ZR275)*

Recombinant. ZR275 recognizes Sry-related HMG-box gene 10 (SOX-10), a nuclear transcription factor that participates in neural crest development and in the specification and differentiation of cells of melanocytic lineage, has been recently shown to be a sensitive marker of melanoma. SOX-10 nuclear expression was found in virtually all cases of melanomas (97%) and close to half of cases of malignant peripheral nerve sheath tumors (49%). In sentinel nodes, SOX-10 is positive in metastatic melanomas and nodal capsular nevus.

Species: Rabbit Monoclonal **Cat#:** Z2591 ›››

IHC: Human malignant melanoma stained with ZR275



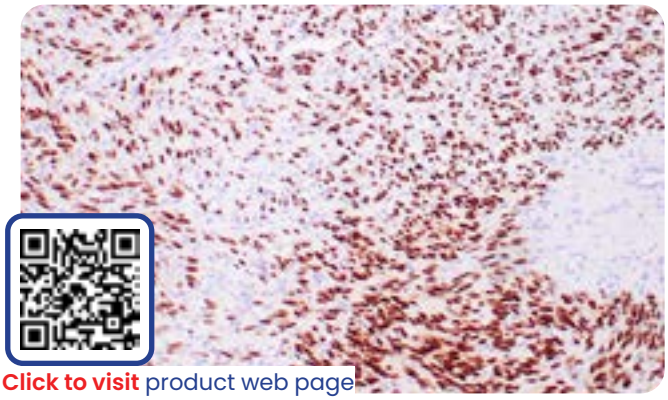
Click to visit product web page

SOX-10 *(clone ZM10)*

ZM10 recognizes Sry-related HMG-box gene 10 (SOX-10), a nuclear transcription factor that participates in neural crest development and in the specification and differentiation of cells of melanocytic lineage, has been recently shown to be a sensitive marker of melanoma. SOX-10 nuclear expression was found in virtually all cases of melanomas (97%) and close to half of cases of malignant peripheral nerve sheath tumors (49%). In sentinel nodes, SOX-10 is positive in metastatic melanomas and nodal capsular nevus but not in dendritic cells.

Species: Mouse Monoclonal **Cat#:** Z2293 ›››

IHC: Human malignant melanoma stained with ZM10



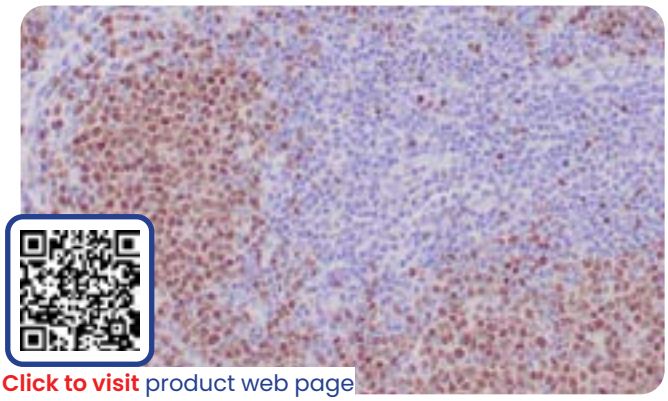
Click to visit product web page

SOX-11 *(clone ZR462)*

Recombinant. ZR462 recognizes SOX-11, a transcription factor that belongs to the SOX (SRY-related HMG-box) family of proteins. These proteins play a crucial role in regulating gene expression during development and maintaining various tissue functions in adults. SOX-11 is normally expressed in the developing human central nervous system and plays a role in embryonic cell determination. SOX-11 is aberrantly expressed in various types of cancers. In mantle cell lymphoma (MCL), SOX-11 is often overexpressed and is used as a diagnostic marker.

Species: Rabbit Monoclonal **Cat#:** Z2823 ›››

IHC: Human mantle cell lymphoma stained with ZR462



Click to visit product web page

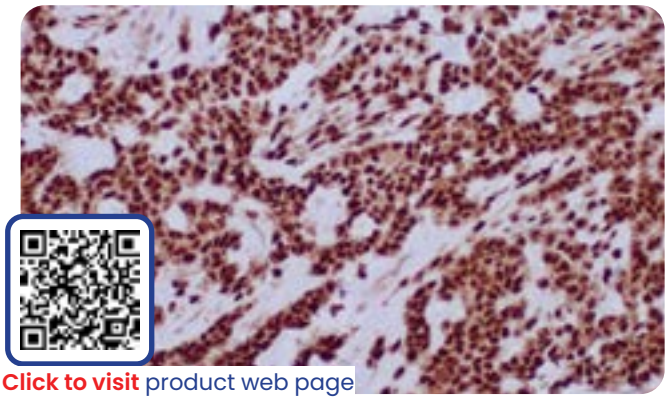
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

SS18-SSX *(clone ZR463)*

Recombinant. ZR463 recognizes SS18, a protein that is a part of the SWI/SNF complex. The SS18-SSX (t(X;18)(p11.2;q11.2) fusion proteins are a result of a frame-fusion that fuse the nano-SS18 tumor gene on chromosome 18 with X chromosome genes nano-SSX1-tumor, nano-SSX2-tumor, and to a lesser extent nano-SSX4. This specific gene fusion is commonly associated with (>95%) synovial sarcoma. The immunohistochemical demonstration of nuclear SS18-SSX fusion expression is diagnostic of synovial sarcoma.

Species: Rabbit Monoclonal **Cat#:** Z2824 >>>

IHC: Human synovial sarcoma stained with ZR463



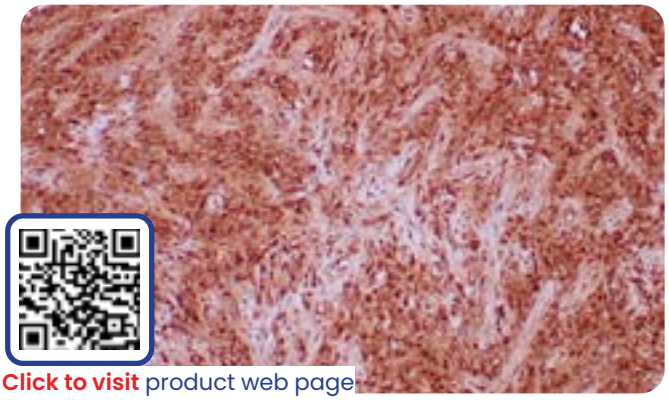
Click to visit product web page

STAT6 *(clone ZR289)*

Recombinant. ZR289 recognizes STAT6. STAT6 is a transcription factor capable of being activated in the Jak/STAT signal transduction pathway responsible for mediating IL-4 immune signaling. STAT6 is a reliable marker distinguishing solitary fibrous tumors from other soft tissue neoplasms. Gene fusions are common in solitary fibrous tumors. Recent next-generation sequencing studies demonstrated the presence of a NAB2-STAT6 fusion, formed by an paracentric inversion fusing two neighboring genes on chromosome 12q13. In 55-100% of solitary fibrous tumors.

Species: Rabbit Monoclonal **Cat#:** Z2727 >>>

IHC: Human solitary fibrous tumor stained with ZR289



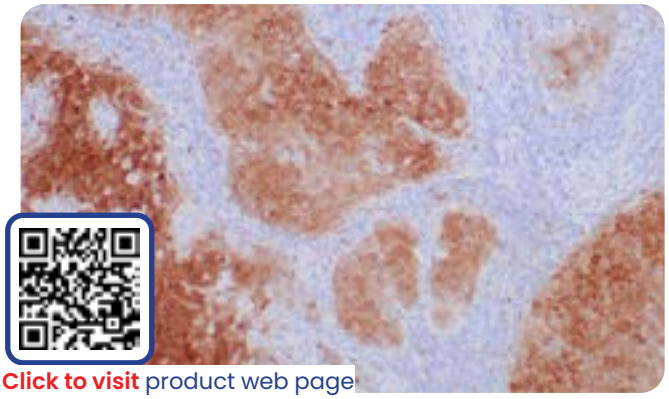
Click to visit product web page

Stathmin *(clone ZR398)*

Recombinant. ZR398 recognizes Stathmin/oncoprotein 18 (STMN1/OP18/metablastin), a conserved, tubulin-associated, intracellular phosphoprotein. Stathmin is a critical regulator of microtubule dynamics and is downregulated by p53 and serves as a transacting protein via phosphorylation for various cell signaling pathways including mitosis and differentiation. As a result of its critical roles in cell cycle regulation, Stathmin (Op18) is present in many cancers including breast carcinomas, and is highly expressed in acute leukemias of different subtypes.

Species: Rabbit Monoclonal **Cat#:** Z2754 >>>

IHC: Human cervical squamous cell carcinoma stained with ZR398



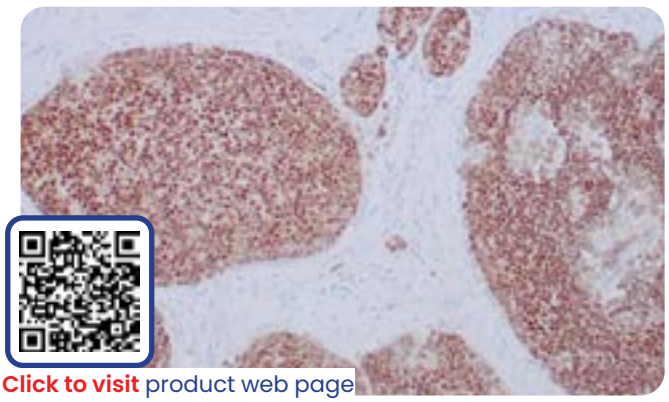
Click to visit product web page

Steroidogenic Factor-1 *(SF-1, clone ZR397)*

Recombinant. ZR397 recognizes Steroidogenic Factor 1 (SF-1), an orphan nuclear receptor that belongs to subfamily 5 and where cofactors are suggested as its ligands. SF-1 has been found to be a regulator of steroidogenic enzyme gene expression. SF-1 is expressed in all steroidogenic tissues, including the adrenal cortex, testicular Sertoli cells and Leydig cells, ovarian theca, hypothalamus, and anterior pituitary. SF-1 plays an important role in adrenal and gonadal development. SF-1 is highly valuable marker to determine the adrenocortical origin of an adrenal mass.

Species: Rabbit Monoclonal **Cat#:** Z2753 >>>

IHC: Human adrenal gland stained with ZR397



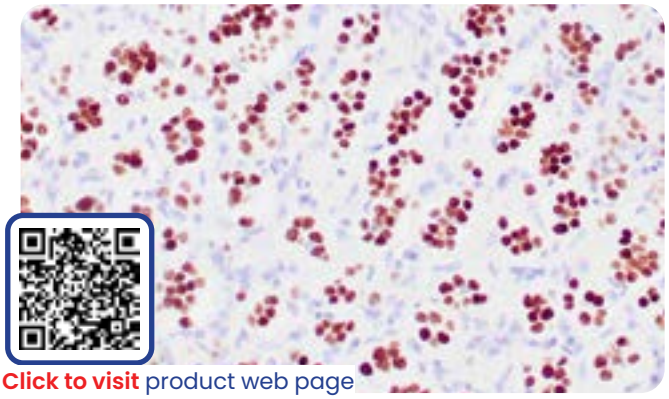
Click to visit product web page

Steroidogenic Factor-1 (SF-1, clone N1665)

N1665 recognizes Steroidogenic Factor 1 (SF-1), an orphan nuclear receptor that belongs to subfamily 5 and where cofactor suggested as its ligands. SF-1 has been found to be a regulator of steroidogenic enzyme gene expression. SF-1 is expressed in all steroidogenic tissues, including the adrenal cortex, testicular Sertoli cells and Leydig cells, ovarian theca, hypothalamus, and anterior pituitary. SF-1 plays an important role in adrenal and gonadal development. SF-1 is highly valuable marker to determine the adrenocortical origin of an adrenal mass.

Species: Mouse Monoclonal **Cat#:** Z2223 >>>

IHC: Human adrenal gland stained with N1665



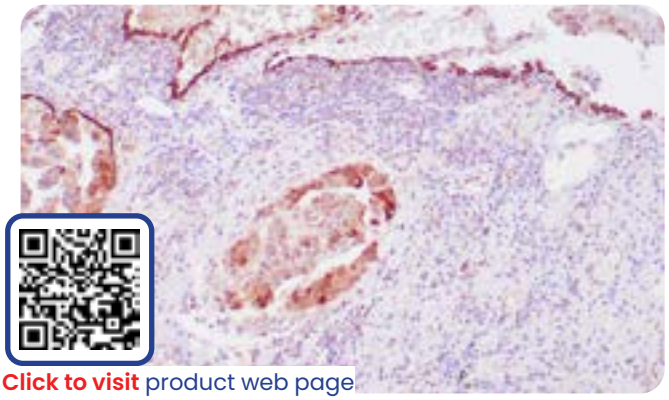
Click to visit product web page

Surfactant (clone ZM124)

Recombinant. ZM124 recognizes Surfactant. Pulmonary Surfactant is primarily responsible for lowering the surface tension at the air-liquid interface in the alveoli, a process that is essential for normal respiration. Pulmonary Surfactant is a mixture of phospholipids and proteins, including four distinct surfactant-associated proteins: SP-A, SP-B, SP-C, and SP-D. SP-B and SP-C are hydrophobic proteins that associate with lipids to promote the absorption of surfactant phospholipids and to reduce the surface tension in the alveoli.

Species: Mouse Monoclonal **Cat#:** Z2428

IHC: Human lung adenocarcinoma stained with ZM124 >>>



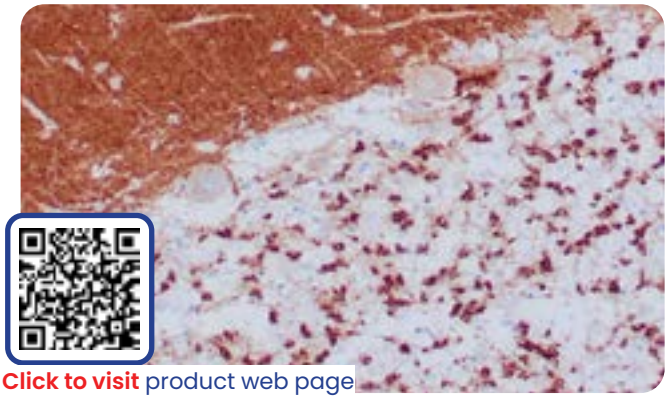
Click to visit product web page

Synaptophysin (clone ZR445)

Recombinant. ZR445 recognizes Synaptophysin, an N-glycosylated integral membrane protein found in neurons and endocrine cells. Synaptophysin contains four transmembrane domains and may function as a gap junction-like channel. Zeta's recombinant Synaptophysin antibody identifies normal neuroendocrine cells and neuroendocrine neoplasms. Diffuse, finely granular, cytoplasmic staining is observed, which correlates with the distribution of the antigen within neurosecretory vesicles. Synaptophysin is an independent, broad-range marker of neural and neuroendocrine differentiation. >>>

Species: Rabbit Monoclonal **Cat#:** Z2801

IHC: Human neuroendocrine tumor stained with ZR445



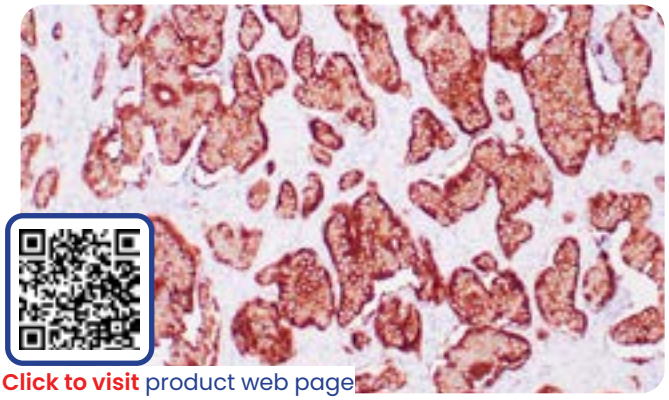
Click to visit product web page

Synaptophysin (clone ZM208)

ZM208 recognizes Synaptophysin, an N-glycosylated integral membrane protein found in neurons and endocrine cells. Synaptophysin contains four transmembrane domains and may function as a gap junction-like channel. Zeta's recombinant Synaptophysin antibody identifies normal neuroendocrine cells and neuroendocrine neoplasms. Diffuse, finely granular, cytoplasmic staining is observed, which correlates with the distribution of the antigen within neurosecretory vesicles. Synaptophysin is an independent, broad-range marker of neural and neuroendocrine differentiation. >>>

Species: Mouse Monoclonal **Cat#:** Z2544

IHC: Human neuroendocrine tumor stained with ZM208



Click to visit product web page

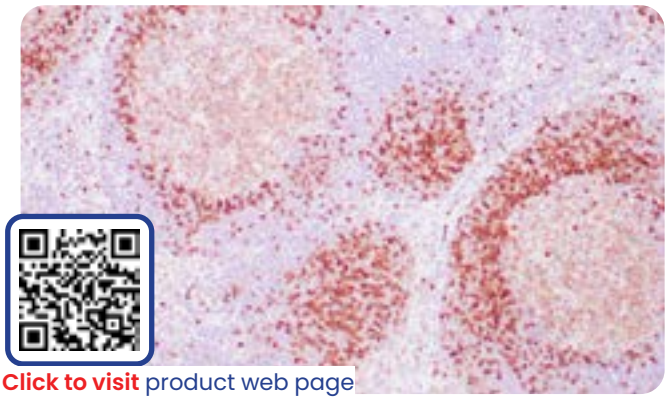
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

TCL1 (clone ZM92)

ZM92 recognizes TCL1 (T-cell leukemia/lymphoma Protein 1A (TCL-1A), also known as p14TCL1) is a product of the TCL1 gene that is involved in T-cell prolymphocytic leukemia (T-PLL). T-PLL is a rare form of mature T-cell leukemia, which is consistently associated with chromosomal rearrangements characterized by the juxtaposition of the TCRA locus on chromosome 14q11 and the TCL1A gene on 14q32.13. TCL1 is overexpressed in B-cell lymphoma, the majority of AIDS-related non-Hodgkin lymphoma-designated immunoblastic plasmacytoid.

Species: Mouse Monoclonal **Cat#:** Z2402 ›››

IHC: Human tonsil stained with ZM92



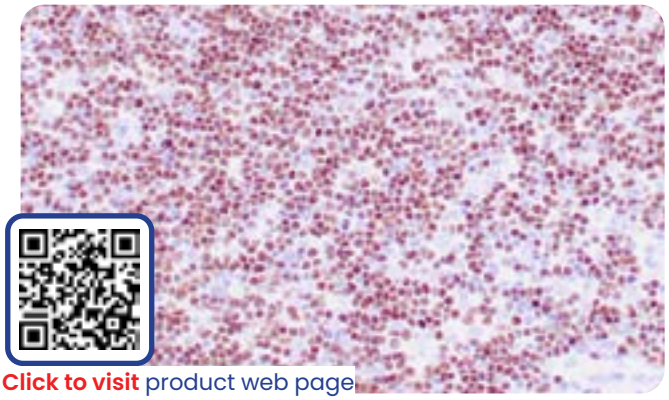
Click to visit product web page

TdT (clone ZM51)

Recombinant. ZM51 recognizes TdT (Terminal deoxynucleotidyl transferase). TdT is an unusual deoxyribonucleic polymerizing enzyme with a molecular weight of about 58 kDa found normally only in B- and T-cell lymphoblasts/lymphocytes. TdT generates antigen receptor diversity by synthesizing non-germ line elements (N-regions) at the junctions of rearranged Ig heavy chain and T cell receptor gene segments. Rare TdT-positive cells are regularly detected in the thymus and bone marrow. Typically, TdT expression in the thymus is variable.

Species: Mouse Monoclonal **Cat#:** Z2391 ›››

IHC: Human type B1 thymoma stained with ZM51



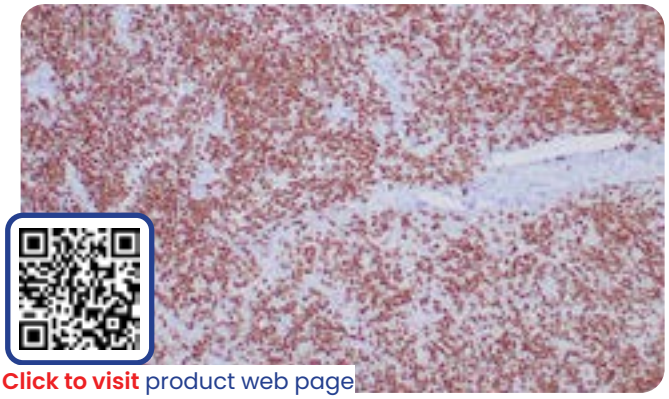
Click to visit product web page

TdT (clone ZR446)

Recombinant. ZR446 recognizes TdT (Terminal deoxynucleotidyl transferase). TdT is an unusual deoxyribonucleic polymerizing enzyme with a molecular weight of about 58 kDa found normally only in B- and T-cell lymphoblasts/lymphocytes. TdT generates antigen receptor diversity by synthesizing non-germ line elements (N-regions) at the junctions of rearranged Ig heavy chain and T cell receptor gene segments. Rare TdT-positive cells are regularly detected in the thymus and bone marrow. Typically, TdT expression in the thymus is variable.

Species: Rabbit Monoclonal **Cat#:** Z2802 ›››

IHC: Human type B1 thymoma stained with ZR446



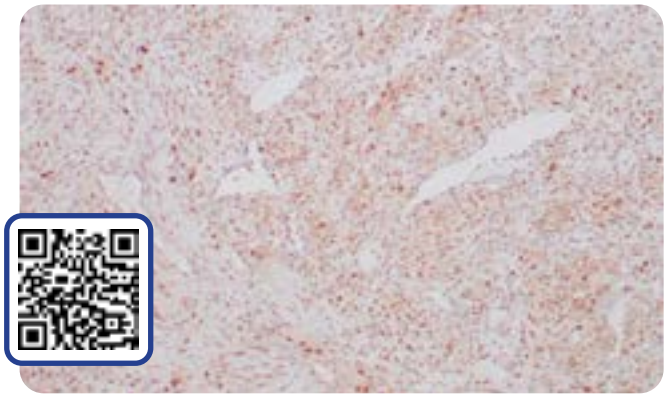
Click to visit product web page

TFE3 (clone ZR365)

Recombinant. ZR365 recognizes TFE3 (Transcription Factor E3), which belongs to the basic helix-loop-helix zipper transcription factor family. TFE3 gene, located on Xp11.2, is translocated with more than 20 different genes in a variety of tumor types, most commonly in TFE3 family translocation renal cell carcinoma (RCC), and where children and young adults have a good prognosis with this translocation while older adults may have a worse prognosis. Overall, these TFE3 translocations often lead to upregulation of TFE3 and subsequent cell proliferation.

Species: Rabbit Monoclonal **Cat#:** Z2605

IHC: Human ovarian sclerosing stromal tumor stained with ZR365

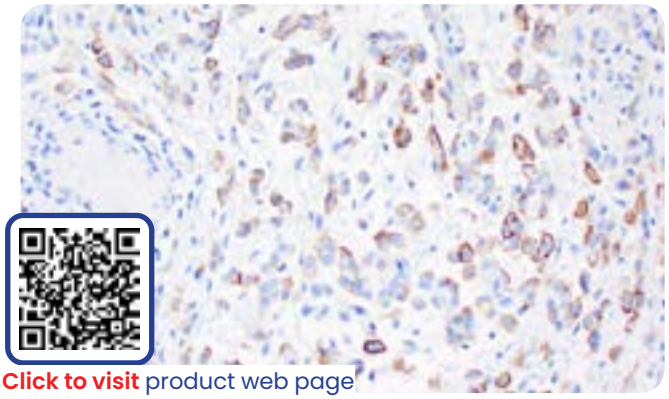


Thrombomodulin CD141 (clone ZM105)

ZM105 recognizes Thrombomodulin/CD141, a transmembrane glycoprotein with natural anticoagulant properties. Thrombomodulin/CD141 binds a protein of 75kDa. Thrombomodulin is normally expressed by a restricted number of cells, such as endothelial and mesothelial cells. In addition, synovial lining and syncytiotrophoblasts of placenta also express Thrombomodulin. Thrombomodulin/CD141 is present in almost all of benign vascular tumors and majority of malignant vascular tumors.

Species: Mouse Monoclonal **Cat#:** Z2416 >>>

IHC: Human urothelial carcinoma stained with ZM105



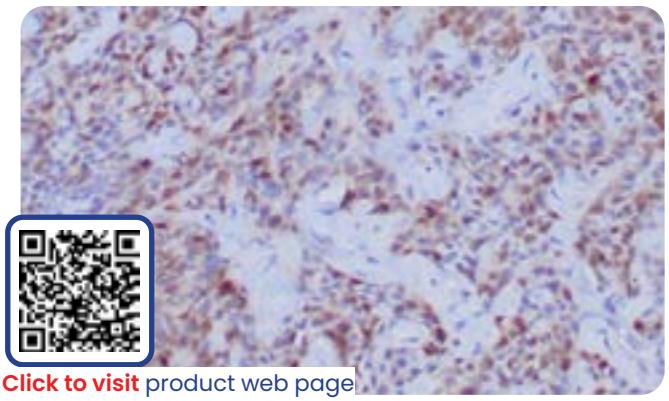
Click to visit product web page

Thymidylate Synthase (TS, clone ZR245)

Recombinant. ZR246 recognizes Thymidylate Synthase (TS). The antibody to Thymidylate Synthase (TS) recognizes a protein of 36kDa that converts deoxyuridine monophosphate (dUMP) to deoxythymidine monophosphate (dTMP), essential for DNA biosynthesis. TS expression has been studied in a variety of tumor types, including colorectal, gastric, pancreatic, breast, and non-small cell lung cancers, and has been investigated in the context of tumor biology.

Species: Rabbit Monoclonal **Cat#:** Z2719 >>>

IHC: Human urothelial carcinoma stained with ZR245



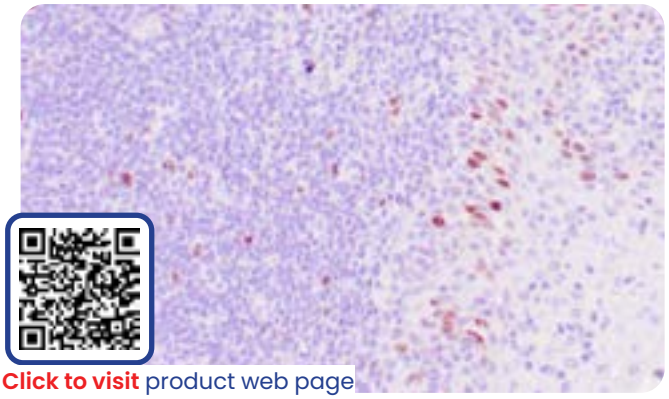
Click to visit product web page

Thymidylate Synthase (TS, clone TS106)

TS106 recognizes Thymidylate Synthase (TS). The antibody to Thymidylate Synthase (TS) recognizes a protein of 36kDa that converts deoxyuridine monophosphate (dUMP) to deoxythymidine monophosphate (dTMP), essential for DNA biosynthesis. TS expression has been studied in a variety of tumor types, including colorectal, gastric, pancreatic, breast, and non-small cell lung cancers, and has been investigated in the context of tumor biology.

Species: Mouse Monoclonal **Cat#:** Z2199 >>>

IHC: Human colon carcinoma stained with TS106



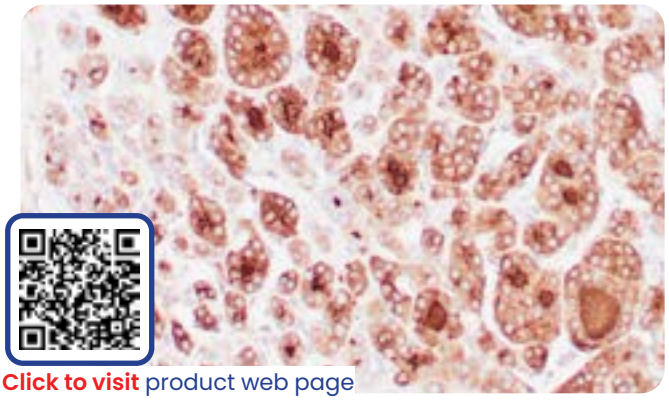
Click to visit product web page

Thyroglobulin Cocktail (clone 2H11+6E1)

2H11+6E1 recognizes Thyroglobulin. Thyroglobulin is a macromolecular glycoprotein localized in the follicular epithelium of the thyroid. It is a sensitive and specific marker for identifying tumors of thyroid origin, particularly papillary and follicular carcinomas. Demonstration of Thyroglobulin in a metastatic lesion establishes the thyroid origin of the tumor. Adenocarcinomas of non-thyroid origin are not reactive for Thyroglobulin. It is used as a tool to differentiate primary thyroid carcinomas from metastatic tumors.

Species: Mouse Monoclonal **Cat#:** Z2062 >>>

IHC: Human thyroid gland stained with 2H11+6E1



Click to visit product web page

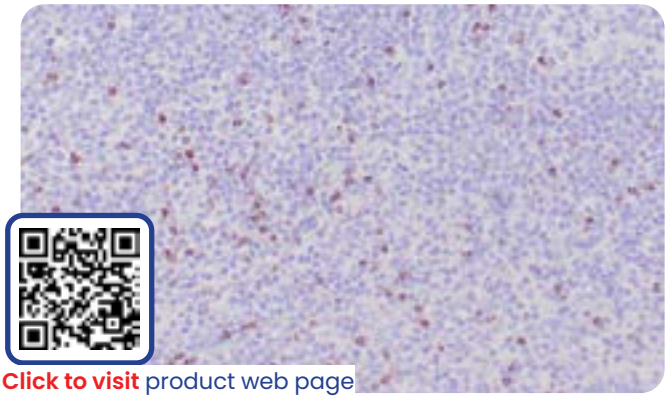
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

TIA-1 *(clone ZR284)*

Recombinant. ZR284 recognizes TIA-1 (T cell Intracellular Antigen 1), a protein expressed in cells possessing cytolytic potential and could be involved in the signaling cascade of Fas (CD95)-mediated apoptosis. TIA-1 is a 15-kDa cytoplasmic granule-associated protein also designated as GMP-17 (Granule Membrane Protein). Within hematopoietic cell lines, the TIA-1 antibody reacts with about 90% of CD16+, 60% of CD8+, and less than 10% of CD4+ normal peripheral blood lymphocytes.

Species: Rabbit Monoclonal **Cat#:** Z2599 ›››

IHC: Human nasal T/NK cell lymphoma stained with ZR284



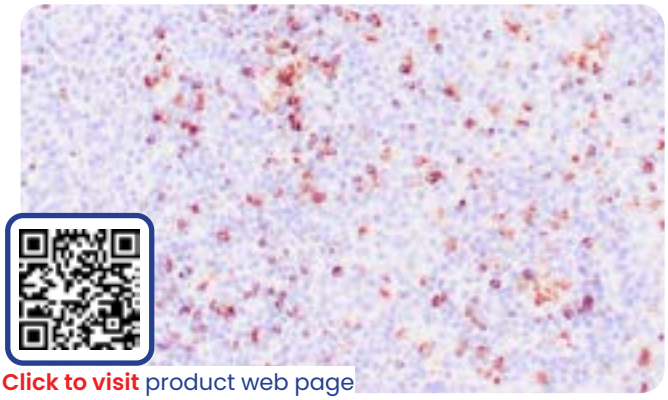
Click to visit product web page

TIA-1 *(clone 2G9A10F5)*

2G9A10F5 recognizes TIA-1 (T cell Intracellular Antigen 1), a protein expressed in cells possessing cytolytic potential and could be involved in the signaling cascade of Fas (CD95)-mediated apoptosis. TIA-1 is a 15-kDa cytoplasmic granule-associated protein also designated as GMP-17 (Granule Membrane Protein). Within hematopoietic cell lines, the TIA-1 antibody reacts with about 90% of CD16+, 60% of CD8+, and less than 10% of CD4+ normal peripheral blood lymphocytes.

Species: Mouse Monoclonal **Cat#:** Z2183 ›››

IHC: Human nasal T/NK cell lymphoma stained with 2G9A10F5



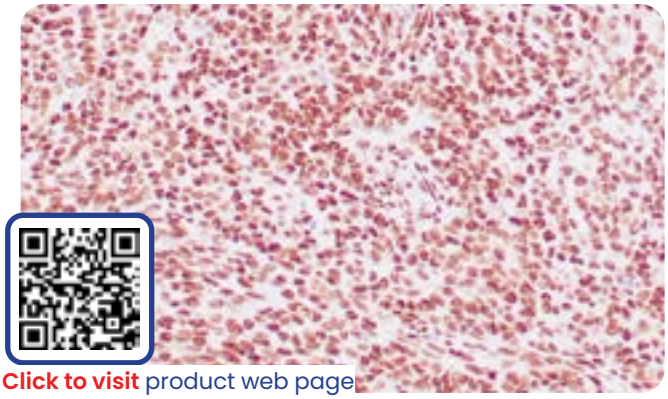
Click to visit product web page

TLE1 *(clone ZM93)*

Recombinant. ZM93 recognizes TLE1 (Transducin-like enhancer protein 1), a transcriptional repressor that plays a key role in neurogenesis, segmentation and sex determination. Key players in the Notch pathway are the TLE genes, which are human homologs of the Drosophila Groucho gene. Transducin-like enhancer protein 1 (TLE1) is a protein that is encoded by the TLE1 gene and is involved in control of hematopoiesis, neuronal, and terminal epithelial differentiation. Increased expression has been reported in synovial sarcoma and other neoplasms.

Species: Mouse Monoclonal **Cat#:** Z2403 ›››

IHC: Human synovial sarcoma stained with ZM93



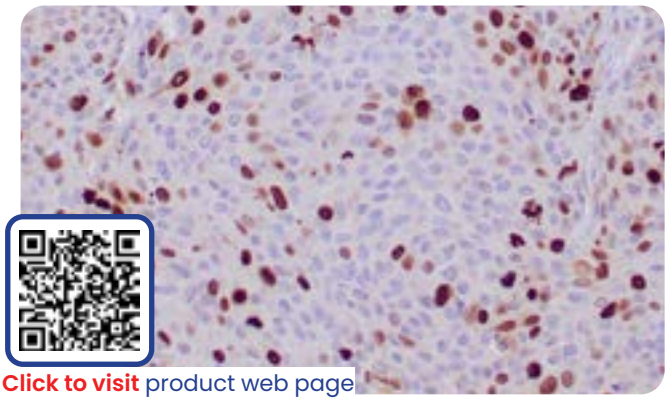
Click to visit product web page

Topoisomerase IIα *(clone ZR94)*

Recombinant. ZR94 recognizes Topoisomerase II alpha (nano-TOPO2A), a 170kDa nuclear protein that plays an important role in DNA synthesis and DNA transcription, as well as chromosomal segregation during mitosis. Topoisomerase II alpha (nano-TOPO2A) gene is reported to be a sensitive and specific marker of cell proliferation. It is synthesized mainly in tissues with high human cellular turnover and has been shown to be over-expressed in many human cancers. Decreased expression is the predominant mechanism of resistance.

Species: Rabbit Monoclonal **Cat#:** Z2404 ›››

IHC: Human squamous cell carcinoma stained with ZR94



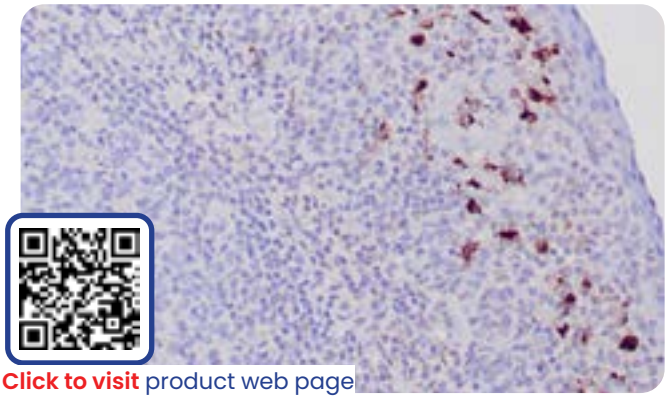
Click to visit product web page

TRAcP *(clone ZR234)*

Recombinant. ZR234 recognizes TRAP (Tartrate-resistant acid phosphatase), a 35kDa protein that exists as two isoforms (5a and 5b). TRAP is produced from osteoclasts and elevated during bone resorption. TRAP is an iron containing glycoprotein, which catalyzes the conversion of orthophosphoric monoester to alcohol and orthophosphate. TRAP is the most basic of the acid phosphatases and is the only form not inhibited by L(+)tartrate. TRAP is synthesized as a latent proenzyme and is activated by proteolytic cleavage.

Species: Rabbit Monoclonal **Cat#:** Z2714 ›››

IHC: Human tonsil stained with ZR234



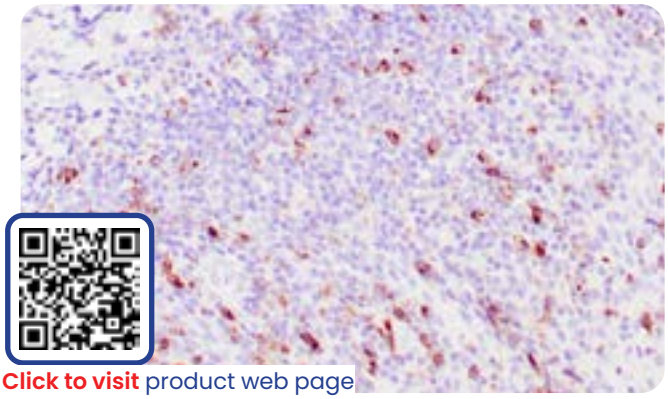
Click to visit product web page

TRAcP *(clone ZM174)*

ZM174 recognizes TRAcP (Tartrate-resistant acid phosphatase), a 35kDa protein that exists as two isoforms (5a and 5b). TRAcP is produced from osteoclasts and elevated during bone resorption. TRAcP is an iron containing glycoprotein, which catalyzes the conversion of orthophosphoric monoester to alcohol and orthophosphate. TRAP is the most basic of the acid phosphatases and is the only form not inhibited by L(+)tartrate. TRAcP is synthesized as a latent proenzyme and is activated by proteolytic cleavage.

Species: Mouse Monoclonal **Cat#:** Z2486 ›››

IHC: Human spleen involved by hairy cell leukemia stained with ZM174



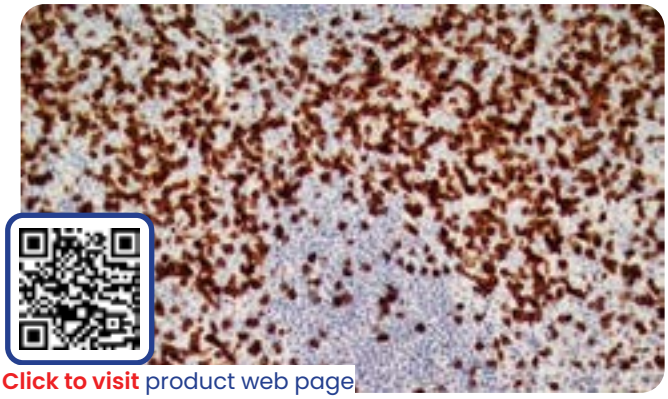
Click to visit product web page

NEW! TRBC1 *(clone ZR481)*

Recombinant. ZR481 recognizes TRPS1, named for its association with the autosomal dominant genetic disorder TRPS1, which has been found to be a critical modulator in mesenchymal-to-epithelial transition during the development and differentiation of several types of tissue, including cartilage, bone, kidney, and hair follicle. Recently, TRPS1 was identified as a novel GATA transcriptional factor, functioning as an essential regulator for the growth and differentiation of normal mammary epithelial cells.

Species: Rabbit Monoclonal **Cat#:** Z2825 ›››

IHC: lymph node stained with ZR481



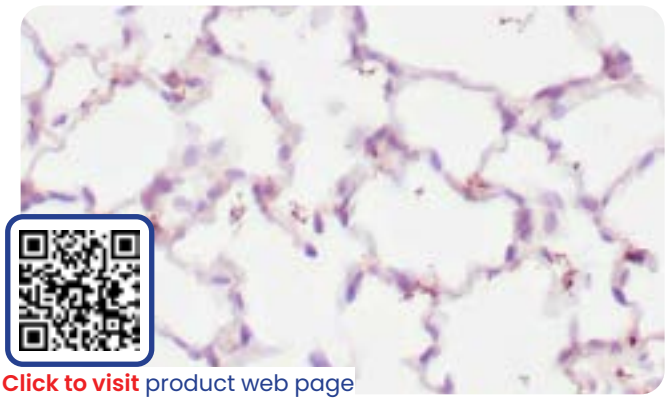
Click to visit product web page

Treponema pallidum *(Polyclonal)*

Recognizes Treponema pallidum, a Gram-negative spirochete bacterium with periplasmic flagella. Syphilis is a sexually transmitted disease caused by Treponema pallidum, a bacterium discovered in 1905 by Schaudinn and Hoffmann who initially named it Spirochaeta pallida. Immunohistochemical detection of Treponema pallidum is reported to be more sensitive than silver stains or Warthin-Starry or Steiner (41% sensitive). Diaminobenzidine chromogen can be problematic.

Species: Rabbit Polyclonal **Cat#:** Z2554 ›››

IHC: Human lung infected with treponema organisms stained with polyclonal T. pallidum



Click to visit product web page

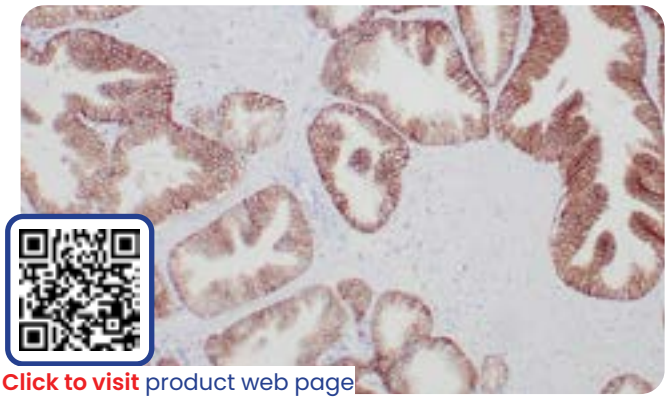
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

TROP2 (clone ZR388)

Recombinant. ZR388 recognizes TROP2 (Trophoblast cell surface antigen 2), which is expressed in many epithelial carcinomas. TROP2 deregulation can be associated with cancer progression in a tumor-type dependent manner. TROP2 (also known as EGP-1 or GA733-1) is a cell surface glycoprotein receptor with a single-pass type I membrane containing an thyroglobulin type-1 domain, an epidermal growth factor-like repeat, a phosphatidylinositol binding site, and a tyrosine phosphorylation site near the C-terminus. TROP2 plays a role in signaling.

Species: Rabbit Monoclonal **Cat#:** Z2744 ›››

IHC: colon carcinoma stained with ZR388



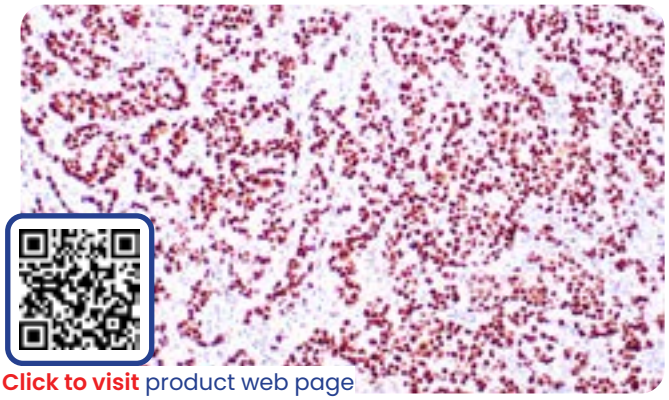
Click to visit product web page

TRPS1 (clone ZR382)

Recombinant. ZR382 recognizes TRPS1, named for its association with the autosomal dominant genetic disorder TRPS1, which has been found to be a critical modulator in mesenchymal-to-epithelial transition during the development and differentiation of several types of tissue, including cartilage, bone, kidney, and hair follicle. Recently, TRPS1 was identified as a novel GATA transcriptional factor, functioning as an essential regulator for the growth and differentiation of normal mammary epithelial cells and possibly involved in the development of breast cancer.

Species: Rabbit Monoclonal **Cat#:** Z2673 ›››

IHC: Human breast carcinoma stained with ZR382



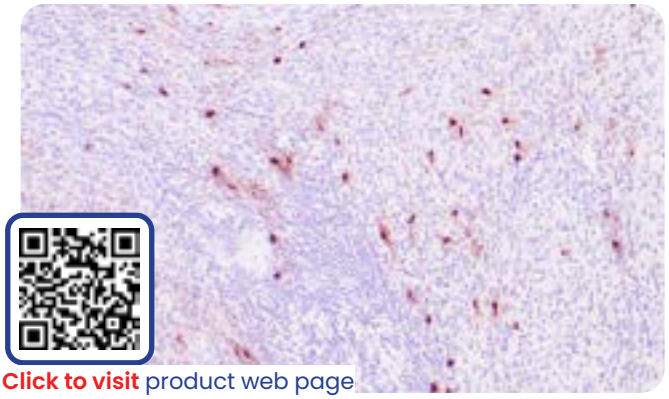
Click to visit product web page

Tryptase (clone ZM96)

ZM96 recognizes Tryptase, a family of trypsin-like serine proteases (peptidase family S1). Tryptase is stored in mast cell secretory granules and basophils. Mast cells are connective tissue cells derived from blood-forming tissues that live altered within and outside substances, which mediate inflammatory and immune responses. Tryptase is released into the extracellular environment and is resistant to all known endogenous proteinase inhibitors. The Tryptase antibody reacts with mast cells distributed in skin, synovium, lung, and heart.

Species: Mouse Monoclonal **Cat#:** Z2406 ›››

IHC: Human tonsil stained with ZM96



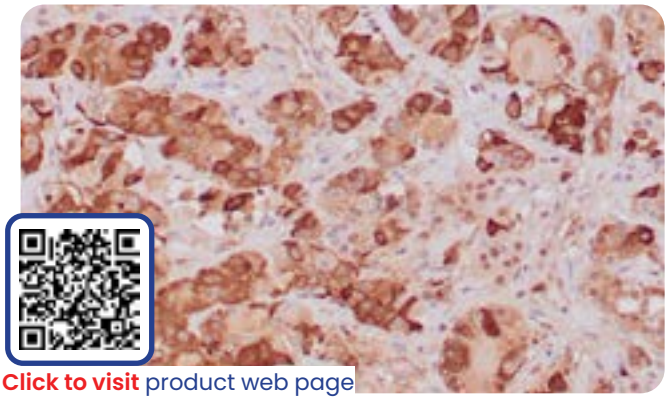
Click to visit product web page

Thyroid Stimulating Hormone (TSH, clone ZM294)

ZM294 recognizes Thyroid Stimulating Hormone (TSH), a protein synthesized and secreted by thyrotope cells in the anterior pituitary gland which regulates the endocrine function of the thyroid gland. The four human glycoprotein hormones (chorionic gonadotropin, luteinizing hormone, follicle stimulating hormone, and Thyroid Stimulating Hormone) are dimers consisting of alpha and beta subunits that are associated non-covalently. The alpha subunits of these hormones are identical; however, their beta chains are unique and confer biological specificity.

Species: Mouse Monoclonal **Cat#:** Z2608 ›››

IHC: Human pituitary adenoma stained with ZM294



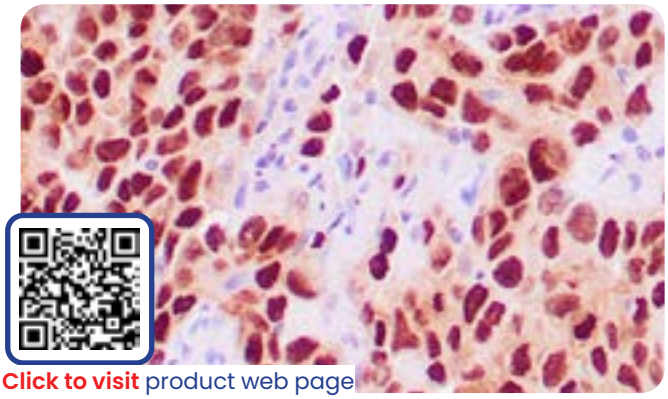
Click to visit product web page

TTF-1/NKX2.1 (clone ZR176)

Recombinant. ZR176 recognizes TTF-1/NKX2.1, known as Thyroid transcription factor-1, a member of the NKX2 family of homeodomain transcription factors. TTF-1/NKX2.1 codes for a protein of 42kDa. TTF-1 is expressed in epithelial cells of the thyroid gland and the lung. Nuclei from liver, stomach, pancreas, small intestine, colon, kidney, bladder, heart, skin, testes, pituitary, prostate, and adrenal glands are unreactive for TTF-1. The TTF-1 antibody is useful in differentiating primary adenocarcinoma of the lung.

Species: Rabbit Monoclonal **Cat#:** Z2370 ›››

IHC: Human lung adenocarcinoma stained with ZR176



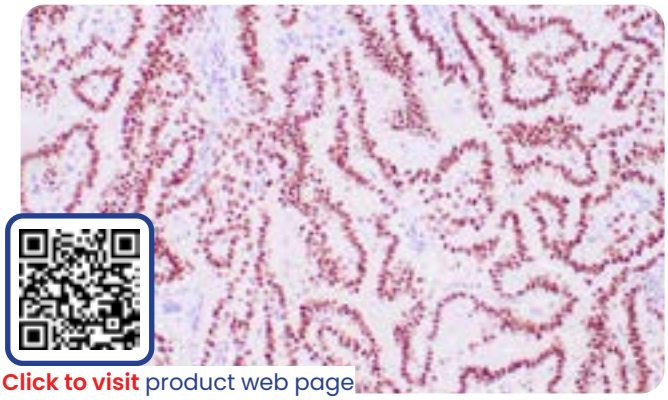
Click to visit product web page

TTF-1 (clone 8G7G3/1)

8G7G3/1 recognizes TTF-1/NKX2.1, known as Thyroid transcription factor-1, a member of the NKX2 family of homeodomain transcription factors. TTF-1/NKX2.1 codes for a protein of 42kDa. TTF-1 is expressed in epithelial cells of the thyroid gland and the lung. Nuclei from liver, stomach, pancreas, small intestine, colon, kidney, bladder, heart, skin, testes, pituitary, prostate, and adrenal glands are unreactive for TTF-1. The TTF-1 antibody is useful in differentiating primary adenocarcinoma of the lung.

Species: Mouse Monoclonal **Cat#:** Z2069 ›››

IHC: Human lung adenocarcinoma stained with 8G7G3/1



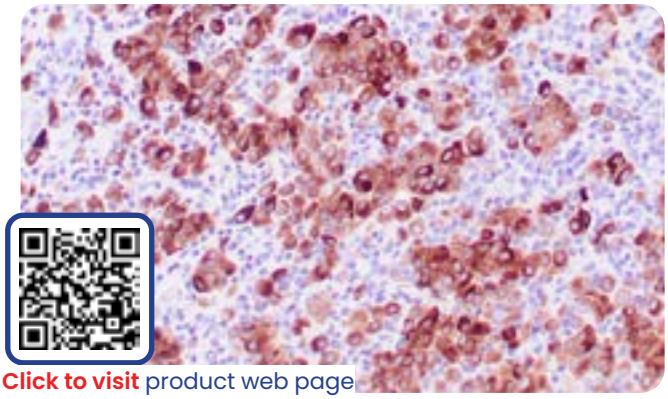
Click to visit product web page

Tyrosinase (clone T311)

T311 recognizes Tyrosinase, a copper-containing metallo-glycoprotein that catalyzes several steps in the melanin pigment biosynthesis pathway: the hydroxylation of tyrosine to L-3,4-dihydroxyphenylalanine (dopa), and the subsequent oxidation of dopa to dopaquinone. Mutations of the Tyrosinase gene result in various forms of albinism. Tyrosinase is one of the targets for cytotoxic T-cell recognition in melanoma patients. Clone T311 shows no cross-reaction with MART-1 and tyrosinase-related protein-1, TRP-1/gp75.

Species: Mouse Monoclonal **Cat#:** Z2074 ›››

IHC: Human melanoma stained with T311



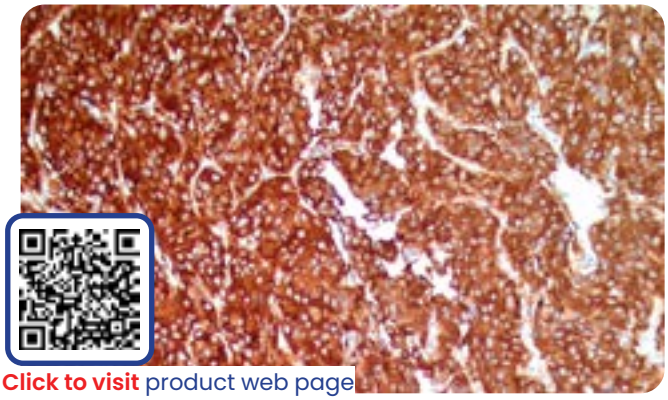
Click to visit product web page

NEW! *Tyrosine Hydroxylase (clone ZR484)*

Recombinant. ZR484 recognizes Tyrosine Hydroxylase (TH). TH is an iron-dependent enzyme that catalyzes the first and rate-limiting step in the biosynthesis of catecholamines. TH is primarily expressed in catecholaminergic neurons of the central and peripheral nervous systems and in the adrenal medulla. Because of this restricted expression, it is widely used as a biochemical and immunohistochemical marker for dopaminergic, noradrenergic, and adrenergic cells. TH immunohistochemistry is used to confirm catecholaminergic differentiation. ›››

Species: Rabbit Monoclonal **Cat#:** Z2859

IHC: Human paraganglioma stained with ZR484



Click to visit product web page

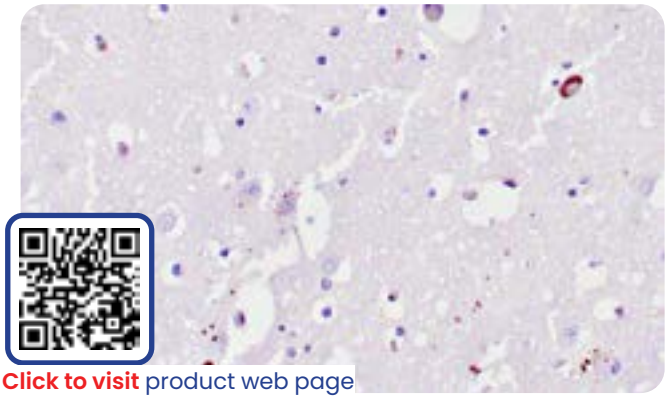
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

Ubiquitin (clone ZM191)

Recombinant. ZM191 recognizes Ubiquitin, a highly conserved acid protein that plays an essential role in the Ubiquitin-proteasome pathway. In ubiquitination process, the protein is first activated by forming a thio-ester complex with the activation component E1, which is then transferred to ubiquitin-carrier protein E2, followed by to ubiquitin ligase E3 for final delivery to epsilon-NH2 of the target protein lysine residue. Mdm2, p53, p21, cd25A, Bcl-2 etc. are shown as targets of ubiquitin-proteasome process as part of cell cycle progression.

Species: Mouse Monoclonal **Cat#:** Z2504 >>>

IHC: Human brain hippocampus stained with ZM191



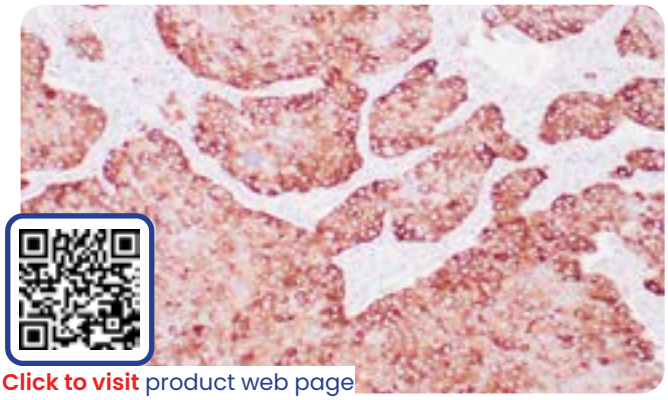
Click to visit product web page

Uroplakin (clone ZM204)

Recombinant. ZM204 recognizes Uroplakin 1A, a member of the transmembrane 4 superfamily, also known as the tetraspanin family. Uroplakin I and the other members are cell-surface proteins that are characterized by the presence of four hydrophobic domains. Uroplakin 1A has isoforms ca and to mediates signal transduction events that play a role in the regulation of cell development, activation, growth and motility. Uroplakin is found in the asymmetrical unit membrane (AUM) where it can complex with other transmembrane 4 superfamily proteins.

Species: Mouse Monoclonal **Cat#:** Z2522 >>>

IHC: Human bladder urothelial carcinoma stained with ZM204



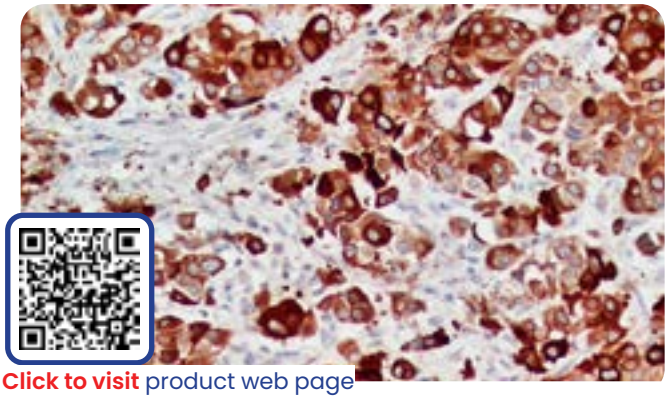
Click to visit product web page

NEW! *Uroplakin II (clone ZR477)*

Recombinant. ZR477 recognizes Uroplakin II (UPII), a 15-kDa transmembrane protein and member of the uroplakin family (other two components are uroplakin I and uroplakin III), primarily expressed in urothelial (transitional) epithelium. Uroplakin II is a highly specific marker for tumors of urothelial origin, particularly urothelial carcinoma (UC). IHC utilizing UPII antibodies exhibits high specificity for urothelial carcinoma compared to UPII, UPIIb, and GATA3. UPII immunohistochemistry is valuable for differentiating urothelial carcinoma from other malignancies, including prostate adenocarcinoma or metastatic breast carcinoma.

Species: Rabbit Monoclonal **Cat#:** Z2851 >>>

IHC: Human urothelial carcinoma stained with ZR477



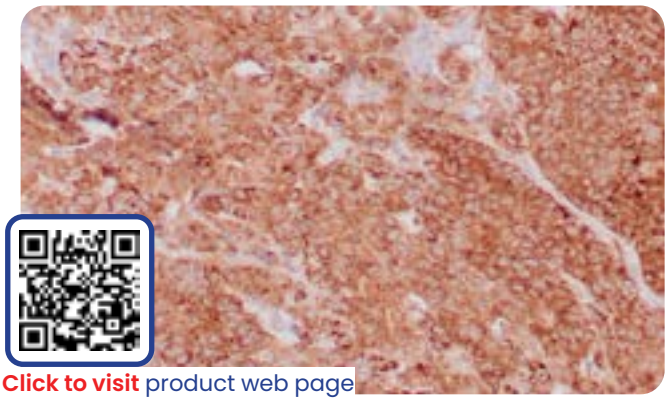
Click to visit product web page

VEGF (clone ZR389)

Recombinant. ZR389 recognizes VEGF (Vascular Endothelial Growth Factor), which plays an important role in angiogenesis, which promotes tumor progression and metastasis. Angiogenesis is one of the hallmarks of cancer where this complex mechanism of tumor progression provides tumor cells with essential nutrients. VEGF antibody is highly specific to VEGF, which is a homodimeric, disulfide-linked glycoprotein with close homology to platelet-derived growth factor (PDGF). There are multiple isoforms of VEGF containing 206-, 189-, 165-, and 121-amino acid residues.

Species: Rabbit Monoclonal **Cat#:** Z2745 >>>

IHC: Human breast carcinoma stained with ZR389



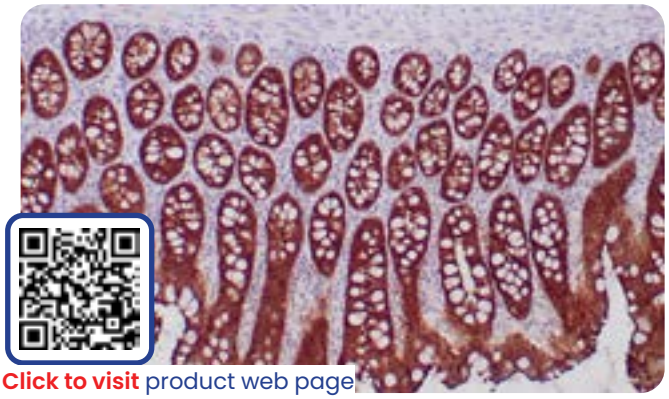
Click to visit product web page

Villin (clone ZR155)

Recombinant. ZR155 recognizes Villin, major constituent in the microvilli, which comprise the brush border of epithelial cells forming absorptive surfaces of the intestinal and renal proximal tubular epithelia. The Villin antibody binds to a protein of 95kDa. The antibody labels the brush border area in the gastrointestinal mucosal epithelium and urogenital tract. Among carcinomas, villin is predominantly expressed in tumors of colorectal origin. ZR155 is useful in identifying malignant cells from primary and metastatic colorectal carcinomas.

Species: Rabbit Monoclonal **Cat#:** Z2491 >>>

IHC: Human colon stained with ZR155



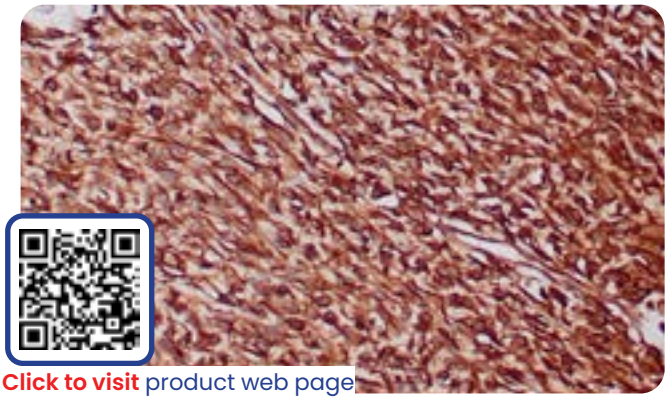
Click to visit product web page

Vimentin (clone ZR381)

Recombinant. ZR381 recognizes Vimentin, a 58kDa intermediate filament for mesenchymal tissue which is ubiquitously expressed in normal mesenchymal cells and is known to maintain cellular integrity and provide resistance against stress. ZR381 shows no cross-reaction with other closely related intermediate filament proteins (IFPs) such as desmin, keratin, neurofilament, and glial fibrillary acid protein. The antibody strongly stains all melanomas and Schwannomas and labels various mesenchymal cells, including melanocytes, lymphocytes, endothelial cells, and fibroblasts.

Species: Rabbit Monoclonal **Cat#:** Z2672 >>>

IHC: Human gastrointestinal stromal tumor stained with ZR381



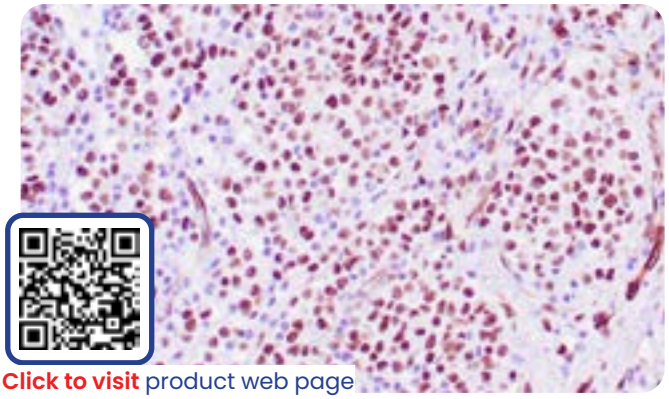
Click to visit product web page

WT-1 (clone 6F-H2)

6F-H2 recognizes Wilms Tumor Protein (WT-1), a suppressor gene located on chromosome 11p13. Wilms Tumor Protein (WT-1) has been identified in proliferative mesothelial cells, malignant mesothelioma, ovarian cystadenocarcinomas, gonadoblastomas, nephroblastomas and desmoplastic small round cell tumor. Lung adenocarcinomas rarely stain positive with the WT-1 antibody. WT-1 is a transcription factor essential for normal development of the urogenital system. WT-1 has both tumor-suppressing and tumorigenic role in several neoplasms, including breast, acute myeloid leukemia and mesothelioma.

Species: Mouse Monoclonal **Cat#:** Z2124 >>>

IHC: Human ovarian adenocarcinoma stained with 6F-H2



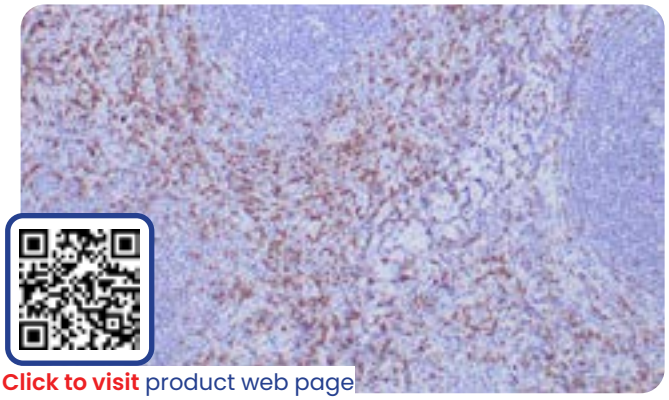
Click to visit product web page

ZAP-70 (clone ZR410)

Recombinant. ZR410 recognizes ZAP-70, a 70 kD protein tyrosine kinase found in T-cells and natural killer cells. ZAP-70 protein is expressed in leukemic cells of approximately 25% of Chronic Lymphocytic Leukemia (CLL) cases as well. ZAP-70 expression is an excellent surrogate marker for the distinction between the Ig-mutated (ZAP-70 negative) and Ig-unmutated (ZAP-70 positive) CLL subtypes and can identify patient groups with divergent clinical courses. The ZAP-70 positive Ig-unmutated CLL cases have a poorer prognosis.

Species: Rabbit Monoclonal **Cat#:** Z2766 >>>

IHC: Human tonsil stained with ZR410



Click to visit product web page

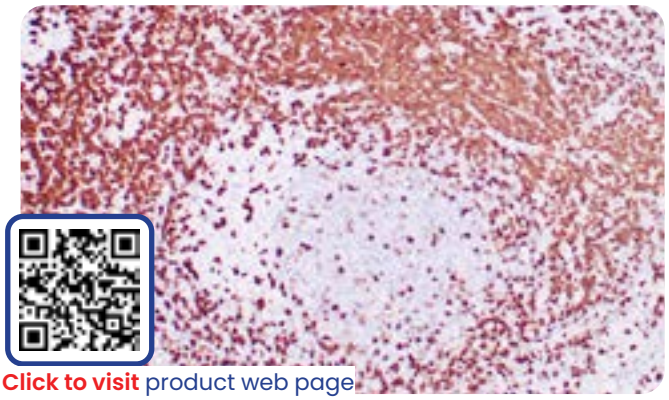
Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

ZAP-70 (clone ZM97)

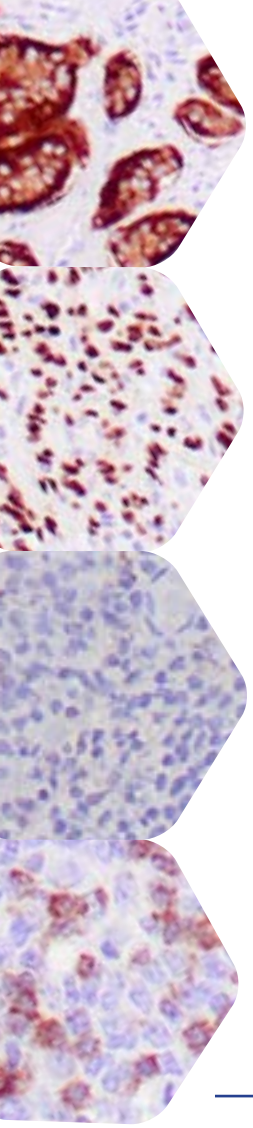
Recombinant. ZM97 recognizes ZAP-70, a 70 kD protein tyrosine kinase found in T-cells and natural killer cells. ZAP-70 protein is expressed in leukemic cells of approximately 25% of Chronic Lymphocytic Leukemia (CLL) cases as well. ZAP-70 expression is an excellent surrogate marker for the distinction between the Ig-mutated (ZAP-70 negative) and Ig-unmutated (ZAP-70 positive) CLL subtypes and can identify patient groups with divergent clinical courses. The ZAP-70 positive Ig-unmutated CLL cases have a poorer prognosis.

Species: Mouse Monoclonal **Cat#:** Z2407 ›››

IHC: Human tonsil stained with ZM97



Click to visit product web page



Detection Kits and Reagents
for FFPE Immunohistochemistry (IHC)

Zeta Corporation offers polymer-based detection to reduce non-specific staining and increase the signal-to-noise ratio of the immunohistochemistry application (IHC). Many of the human organs contain endogenous biotin that might interfere with the actual staining for IHC and require additional blocking steps. With the advent of polymer detection technology, the biotin was completely removed from the detection chemistry and thus reducing the "background" noise. However, the size of the polymer molecule also introduced the steric hindrance. Therefore, Zeta made sure that our detection polymers are small in size to avoid steric hindrance and help increase the sensitivity and specificity of the detection process.

We've developed two different detection chemistries to fit every laboratory need. They are both universal detection chemistries, meaning they can detect both mouse and rabbit primary antibodies on human tissue specimens. To offer more sensitive detection for some of the low-expressing nuclear primary antibodies, Zeta introduced the Zeta MAX detection kits with an amplification step specifically targeting mouse primary antibodies.

Zeta Universal HRP/AP Polymer Detection

A primary antibody specific to an antigen on a formalin-fixed paraffin-embedded (FFPE) tissue section is detected by the Zeta Universal HRP Polymer Detection Kit. The antigen sites are then visualized with DAB chromogen/substrate. This kit is a one-step system using a direct method resulting in a polymer-secondary antibodies-HRP complex that universally detects mouse and rabbit primary antibodies. The resulting chromogenic reaction can be visualized by HRP-compatible chromogens using light microscopy.

Polymer-based detection reduces non-specific staining and increases the signal-to-noise ratio of immunohistochemistry. Many human organs contain endogenous biotin that might interfere with the actual staining for IHC and require additional blocking steps. With polymer detection technology, biotin is completely removed from the detection chemistry thereby reducing the "background" noise. Zeta ensured that our detection polymers are small in size to avoid steric hindrance and help increase the sensitivity and specificity of the detection process.

Zeta Max

The Zeta Max HRP Polymer Detection Kit uses an amplifying reagent (Zeta Max Amplifier) in conjunction with Zeta HRP Polymer (anti-mouse HRP/anti-rabbit HRP) to increase the signal intensity of primary antibodies. The mouse primary antibody specific to an antigen on the formalin-fixed paraffin-embedded (FFPE) tissue section is detected by the Zeta Max Amplifier. The Amplifier reagent is then detected by Zeta HRP Polymer. The Zeta HRP Polymer and the Zeta Max Amplifier reagents are ready-to-use and provided in convenient dropper bottles.

Zeta MAX utilizes unique technology to amplify mouse primary antibodies and particularly antibodies expressed in the nucleus. Zeta MAX reagent penetrates the tissues to tag the primary antibody sites to amplify and generate a multitude of sites for the micro-HRP polymer to bind.

Antibodies are supplied in 2 formats w/ Cat # suffixes: concentrated >> 1.0 ml (**L**), 0.5 ml (**S**) and 0.1 ml (**T**) and ready-to-use >> 7.0 ml (**P**)

Zeta Universal Polymer Detection

Zeta Universal HRP Polymer Detection Kit (with DAB) **Cat#: ZD11**

Reagents: Anti-mouse HRP/anti-rabbit HRP (100 ml)
DAB Chromogen Concentrate (6.25 ml)
DAB Substrate Buffer (118.75 ml)

Zeta Universal HRP Polymer Detection (without DAB) **Cat#: ZD10**

Reagent: Anti-mouse HRP/anti-rabbit HRP (100 ml)

NEW

Zeta Universal AP Polymer Detection Kit **Cat#: ZD12**

Reagents: Anti-mouse AP/anti-rabbit HRP (100 ml)
AP Red Chromogen

NEW **Zeta AP Red Chromogen** (with buffer) **Cat#: ZD16**

Zeta MAX Polymer Detection

Zeta MAX Kit (with DAB) **Cat#: ZD15**

Reagents: Zeta HRP Polymer (anti-mouse HRP/ anti-rabbit HRP) (ready-to-use) (100 ml)
Zeta Max Amplifier reagent (100 ml)
DAB Chromogen Concentrate (6.25 ml)
DAB Substrate Buffer (118.75 ml)

Zeta MAX Kit (without DAB) **Cat#: ZD14**

Reagents: All of the above minus DAB dhromogen and substrate buffer

NEW

Zeta Dual AP/HRP Detection Kit **Cat#: ZD9**

The primary antibody specific to an antigen on formalin-fixed paraffin-embedded (FFPE) tissue section is detected by the Zeta Dual AP/HRP Polymer Detection Kit. The antigen sites are then visualized with AP/HRP chromogen/substrate. The reagent is ready-to-use in a convenient dropper bottle. The Zeta Universal HRP Polymer Detection Kit is a one-step system that uses a direct method, resulting in a polymer-secondary antibodies anti-Rabbit AP /anti-mouse HRP complex that universally detects primary mouse and rabbit antibodies. The resulting chromogenic reaction can be visualized by AP/HRP-compatible chromogens using light microscopy. The staining signals can be amplified with enhancers if necessary.

Detection Reagents and Tools

NEW **Zeta MAX Antibody Diluent** **Cat#: ZD20**
Ready-to-use (Tris Buffered) diluent for diluting primary antibodies and for use as a negative control.

NEW **Zeta MAX Block** **Cat#: ZD7**
For serum-free blocking of non-specific antibody binding in IHC. More effective at reducing non-specific background staining than serum.

NEW **Zeta Peroxide Block** **Cat#: ZD18**
Developed for use in immunolabeling techniques to reduce non-specific background staining due to endogenous peroxidase.

Zeta Antibody Diluent, 500 ml **Cat#: ZD19**
Antibody Diluent is provided as a ready-to-use (Tris Buffered) diluent for diluting primary antibodies and for use as a negative control.

Zeta Citrate Plus HIER Solution (10X), 1L **Cat#: ZD2**
Citrate Plus (10X) HIER Solution is a unique citrate buffer designed to significantly enhance immunohistochemical staining.

Zeta Tris-EDTA HIER Solution (10X), 500 ml **Cat#: ZD6**
Tris-EDTA HIER Solution (10x) pH 9.0) is a unique buffer designed to significantly enhance immunohistochemical staining.

Zeta TBS plus Tween 20 pH 7.4, (20X) 500 ml **Cat#: ZD5**
Optimal formulation of pH stabilizers, salts and detergents for removal excess material from the tissue sample.

Zeta PBS plus Tween 20 pH 7.6 (20X), 1L **Cat#: ZD3**
Optimal formulation of pH stabilizers, salts and detergents designed to effectively remove excess material from microtiter plate wells.

Zeta PAP Pen **Cat#: ZD1**
PAP-Pen (Liquid Blocker) makes a water repellent barrier for manual IHC staining.

Immunohistochemistry (IHC) Troubleshooting Guide

Weak or No Staining:

Verify that the primary antibody was prepared at the correct dilution (if concentrate) and applied for the recommended incubation time. Review antigen retrieval conditions, including buffer type, pH, temperature, and retrieval duration. Confirm reagent integrity/expiration date, instrument performance (if using an automated platform), and that the positive control demonstrates the expected staining pattern. Also review fixation history, as prolonged fixation can reduce antigen availability.

Positive Control Works but Patient Tissue is Negative:

When controls stain appropriately but patient samples do not, consider poor tissue preservation, inadequate fixation, or antibody-specific retrieval requirements.

High Background Staining:

High background is commonly caused by excessive primary antibody concentration, insufficient washing, endogenous enzyme activity (if not using a biotin-free polymer), inadequate blocking, or over-incubation of the detection system. Evaluate whether tissue sections dried during staining and ensure wash buffers are fresh.

Uneven or Patchy Staining:

Patchy staining may result from incomplete deparaffinization, inconsistent reagent coverage, clogged dispensing systems, retrieval variability, or tissue lift. Check instrument dispense patterns, confirm complete paraffin removal, and ensure slides remain level throughout processing.

Edge Staining Artifact:

Strong staining along tissue edges often indicates drying artifacts that occurred before staining or during processing. Maintain tissue hydration whenever possible and avoid delays between sectioning, baking, and staining.

Chromogen Precipitation:

Visible precipitate on tissue sections can be caused by contaminated reagents, expired chromogen, improper reagent preparation, or allowing reagents to dry on the slide. Filter reagents when appropriate and follow manufacturer preparation guidelines closely.

Tissue Lifting During Retrieval:

Sections that detach during antigen retrieval may indicate inadequate slide adhesion, excessive antigen retrieval conditions, poor section quality, or insufficient drying before staining. Use charged slides, optimize baking conditions, and avoid unnecessarily harsh retrieval protocols.

Excessive Counterstain:

Over-counterstaining with hematoxylin can obscure weak chromogenic signals and make interpretation difficult. Reduce hematoxylin exposure time, verify bluing procedures, and monitor staining consistency across runs.

Run-to-Run Variability:

Differences between staining runs are often linked to changes in fixation, tissue processing, reagent lots, instrument maintenance status, environmental conditions, or operator technique. Establish quality control trending and document all process changes.

Endogenous Biotin Interference:

Tissues such as liver, kidney, and certain tumors may contain endogenous biotin that creates nonspecific staining when avidin-biotin detection systems are used. Consider biotin blocking steps or transition to a polymerbased (biotin-free) detection system.

Quality Control Best Practices:

Include positive and negative controls with every run, document reagent lot changes, perform routine instrument maintenance, trend quality indicators over time, and investigate unexpected results before releasing patient data.

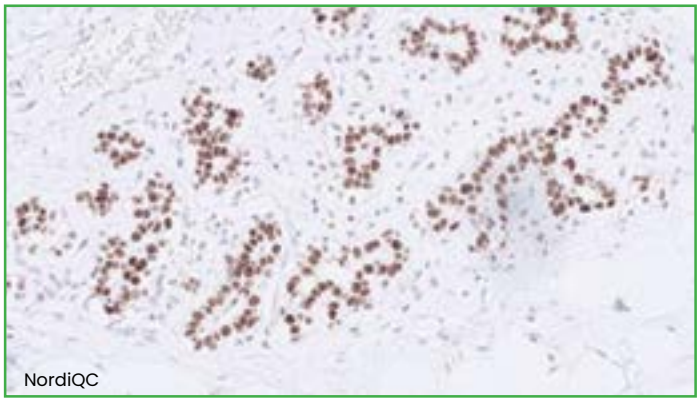
ZETA Corporation

Precision IVD Antibodies for Anatomic Pathology

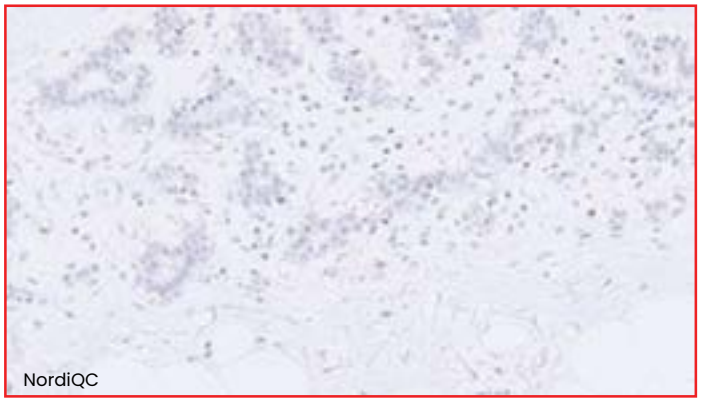
IN FOCUS

TRPS1: Independent Proficiency Testing by NordiQC

Which IVD antibody would you rather use in your clinical pathology lab?

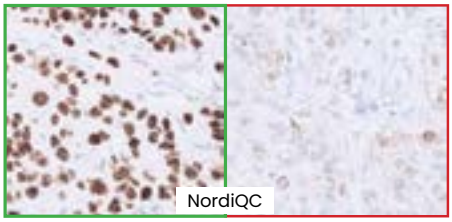


Optimal TRPS1 staining of breast hyperplasia using **Zeta Corporation** rmAb clone ZR382. Note: epithelial cells show an intense, distinct nuclear staining reaction.



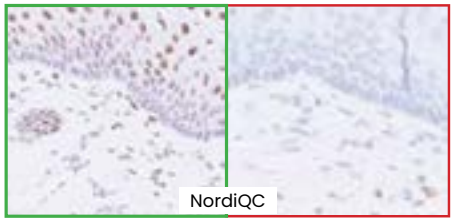
Insufficient TRPS1 staining of breast hyperplasia being false negative in the vast majority of epithelial cells using rmAb clone EP392 (other commercial antibody)

TNBC



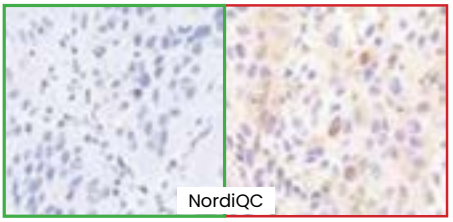
Optimal staining (Zeta ZR382) | Insufficient staining (EP392)

Uterine Cervix



Optimal staining (Zeta ZR382) | Insufficient staining (EP392)

NSCLC



Optimal staining i.e. none (Zeta ZR382) | Aberrant, cytoplasmic staining (EP392)

Concentrated antibodies and assessment marks for TRPS1

Concentrated Antibodies	n	Vendor	Optimal	Good	Borderline	Poor
rmAb clone TRPS1/8131R	1	A	-	1	-	-
rmAb clone BP6231	1	B	1	-	-	-
rmAb clone EP392	16	C	7	4	3	2
	3	D	-	-	2	1
rmAb clone EPR16171	3	E	2	-	-	-
	1	F	-	1	-	-
rmAb clone MSVA-512R	1	G	-	1	-	-
rmAb clone ZR382	17	ZETA	12	4	1	-

NordiQC, adapted

Conclusion:

The rmAb clone ZR382 was the most successful Ab for the demonstration of TRPS1. As concentrated format within a laboratory developed assay, optimal results were obtained on all main, fully automated stainer platforms. The rmAb clone EP392 gave overall an inferior and less reproducible performance.

Read the complete NordiQC report

nordiqc.org

IDH1 (R132H) Zeta-Antibody ZR7 in Glioma

A **ZETA Corporation** White Paper Authors: Dr. rer. nat. Andreas Herrmann and Peiguo Chu M.D. *March, 2024*

SUMMARY:

The cytoplasmatic dimeric protein IDH1 (R132H) mutated at residue arginine R132 is found at high prevalence in secondary glioblastoma and glioma, unfolding a neomorphic activity by catalyzing the conversion of alpha-ketoglutarate to the oncometabolite 2-hydroxyglutarate. The IDH1 (R132H) Zeta-Antibody clone ZR7 readily assesses the IDH1 (R132H) antigen in glioma tissue sections preserved in paraffin and has no cross-reactivity with wild-type IDH1.

The enzyme isocitrate dehydrogenase IDH1 and all NADP(+)-dependent isozymes operate as homodimers that can be found in peroxisomes and in the cell cytoplasm where its activity significantly contributes to NADPH production. IDH1 mutations such as R132H are the earliest detectable genetic alteration in grade II/III diffuse astrocytoma, oligodendroglioma and anaplastic astrocytoma progressing to secondary glioblastomas **(Fig. 1)**.[1] Mutated IDH1 is not observed in rapidly developing primary glioblastoma, which typically misses histologic evidence of a less malignant precursor lesion.[2]

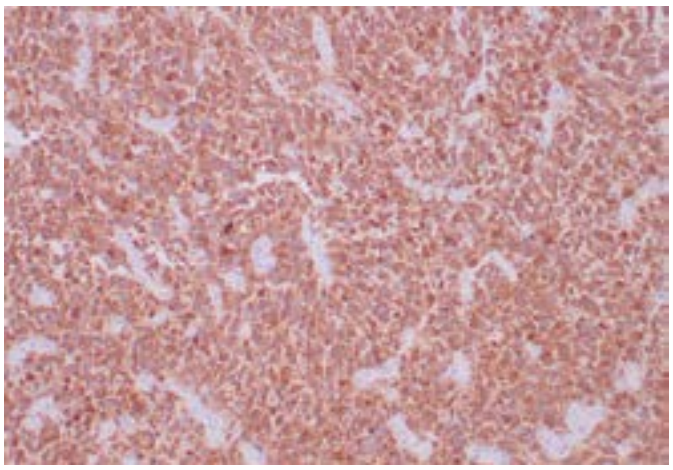


Figure 1: IDH1 (R132H) Zeta-Antibody ZR7. IHC staining of IDH1 (R132H) in human glioma. Image property of Zeta Corporation.

The most frequent mutation in IDH1 is R132H and can be found in 90% of gliomas. Arginine R132 mutated to serine S, valine V, leucine L, cysteine C or glycine G (referred to as $IDH1^{mut}$) are occurring at considerably lower frequencies in gliomas.[1]

Mutation of IDH1 (R132H) is observed heterozygous, hence, IDH1 heterodimerization is frequently described, eliminating a simple IDH1 loss-of-function MOA upon mutation.[3] However, IDH1 mutation R132H has been shown to result in decreased cellular NADPH but increased oncometabolite 2-hydroxyglutarate levels.[1,4,5,6]

The IDH1 (R132H) Zeta-Antibody ZR7 has been raised against monomeric IDH1 (R132H) **(Fig. 2)**.

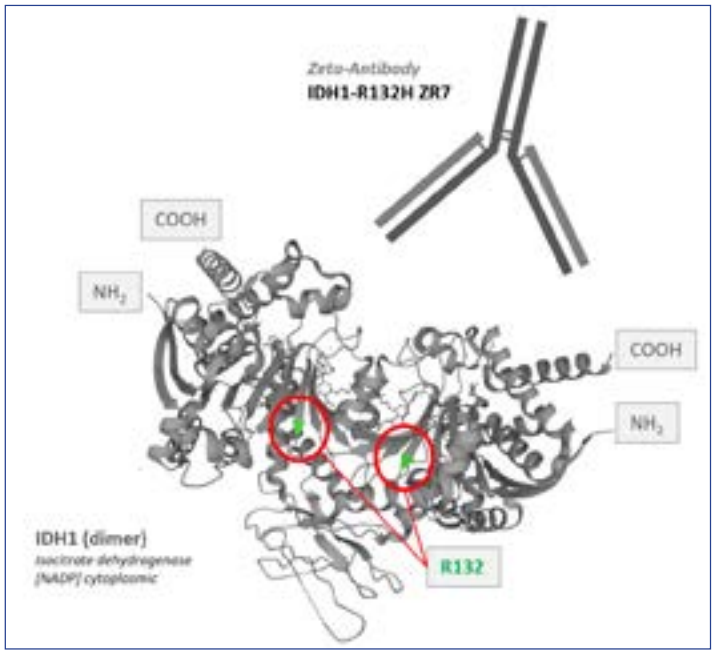


Figure 2: IDH1 (R132H) Zeta-Antibody ZR7 epitope mapping to arginine R132 mutated to histidine. Antigen recognition by IDH (R132H) ZR7 shown. Arginines R132 encircled (red) and highlighted (green) within an IDH1 dimer. Illustration courtesy of A. Herrmann.

Thus, IDH1 (R132H) Zeta-Antibody ZR7 readily assesses IDH1 (R132H) protein expression in human glioma and secondary glioblastoma.

References:

1. Gupta, R. *et al.* Mod Pathol **26**:619–625 (2013).
2. Ohgaki, H. *et al.* Clin Cancer Res **19**(4):764-72 (2013).
3. Brooks, E. *et al.* J Biomol Screen **19**(8):1193-1200 (2014).
4. Zhao, S. *et al.* Science **324**:261–265 (2009).
5. Dang, L. *et al.* Nature **462**:739–744 (2009).
6. Xu, W. *et al.* Cancer Cell **19**:17–30 (2011).

Learn more about this antibody

International Distributors

NORTH AMERICA

Canada
Mexico
United States

SOUTH AMERICA

Argentina
Brazil
Chile
Colombia
Venezuela

AFRICA

Algeria
Cote d'Ivoire
Egypt
Ethiopia
Morocco
South Africa

CENTRAL AMERICA

Belize
Costa Rica
El Salvador
Guatemela
Honduras
Nicaragua
Panama

MIDDLE EAST

Bahrain
Iraq
Israel
Jordan
Oman
Saudi Arabia
UAE
Yemen

EURASIA

Turkey

EUROPE

Austria
Belarus
Belgium
Bulgaria
Croatia
Czech
Denmark
Finland
France
Germany
Greece
Italy
Netherlands
Poland
Romania
Russia
Spain
Sweden
Switzerland
UK
Ukraine

ASIA

China
Hong Kong
India
Indonesia
Japan
Kazakhstan
Myanmar
Pakistan
Philippines
Singapore
South Korea
Sri Lanka
Taiwan
Vietnam

CLICK to visit
Distributor Web Page

ZETA Corporation

Website: zeta-corp.com
Email: sales@zeta-corp.com
Phone US: (626) 355-2053
Fax US: (626) 836-9149

605 E Huntington Dr; #204
Monrovia, CA 91016
USA