NEW

ZETA Corporation

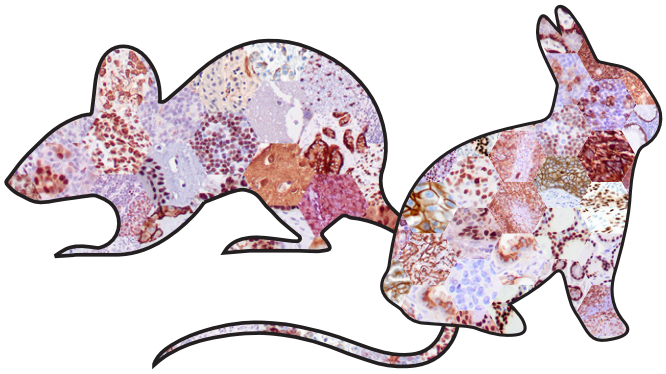
Target-Validated and Characterized CE/IVD Antibodies for Anatomic Pathology

NEW PRODUCTS - July 2022

RAbMono™ (Rabbit Monoclonal) Markers

Zeta Corporation designs and develops tumor-specific biomarkers using cutting edge technology to uniquely select the immunogens for our famed RAbMono™ (Rabbit Monoclonal) and MonoMab™ (Monospecific monoclonal antibodies). Zeta's RAbMono™ and MonoMab™ Antibodies are produced through the hybridoma and recombinant technologies.

Zeta offers over 375 individual primary antibodies of high-quality, FDA registered, IVD certified for Pathology/IHC. These antibodies are carefully chosen and developed to consistently produce staining on formalin-fixed paraffin-embedded tissue (FFPE) sections. Our antibodies are carefully screened and rigorously tested to provide unparalleled consistency and reliability in immunohistochemical staining. Every antibody developed in-house goes through Design and Development processes as required by ISO 13485. These antibodies are tested and validated by leading laboratories globally and external quality control institutions like the NordicQC.



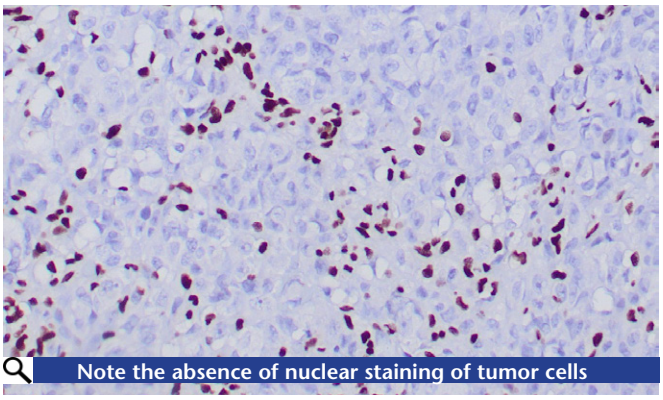
Note: All antibodies are offered in different format and size with the suffix after the Catalog #s; "L", "S" & "T" for Concentrated antibodies in 1.0 ml, 0.5 ml & 0.1 ml sizes respectively, and suffix "P" for Ready-To-Use (RTU) in 7 ml.

BRG1/SMARCA4 (clone ZR390) IVD

BRG1 is mutated in multiple human tumors, including hypercalcemic type of small cell carcinoma of ovary and uterine sarcoma and undifferentiated carcinoma. The SWI-SNF complex is involved in the activation of transcription via the remodeling of nucleosome structure in an ATP-dependent manner. Brm (also designated SNF2 alpha) and Brg-1 (also designated SNF2 beta) are the ATPase subunits of the mammalian SWI/SNF complex. (more)

Species: Rabbit Monoclonal **Cat#:** Z2746

IHC: Human ovarian small cell carcinoma stained with ZR390



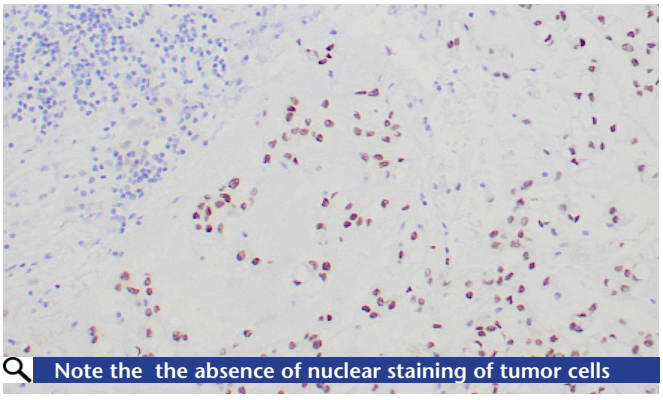
Note the absence of nuclear staining of tumor cells

Brachyury (clone ZR391) IVD

The T-box gene family comprises members with a unique DNA binding domain. The best characterized T-box (Tbx) gene, brachyury or T, encodes a transcription factor that plays a vital role in early vertebrate development. Tbx genes are a family of developmental regulators with more than 20 members recently identified among invertebrates and vertebrates. Mutations in Tbx genes have been found to cause several human diseases. The understanding of functional mechanisms of Tbx... (more)

Species: Rabbit Monoclonal **Cat#:** Z2747

IHC: Human chordoma stained with ZR391



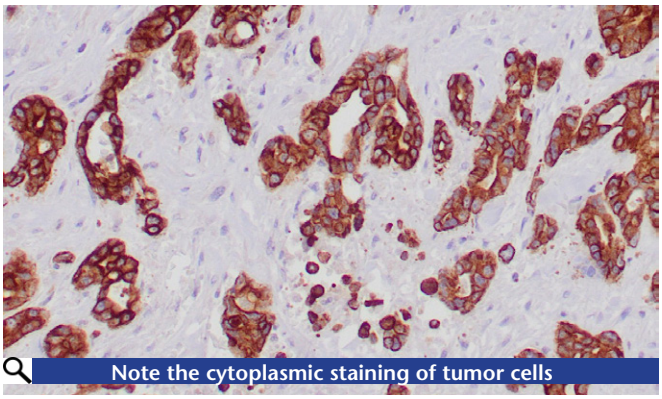
Note the the absence of nuclear staining of tumor cells

Cytokeratin 19 (clone ZR143) IVD

This Ab reacts with the rod domain of human cytokeratin 19 (CK19), a polypeptide of 40kDa. CK19 is expressed in the sweat gland, mammary gland ductal and secretory cells, bile ducts, gastrointestinal tract, bladder urothelium, oral epithelia, esophagus, and ectocervical epithelium. Anti-CK19 reacts with a wide variety of epithelial malignancies, including colon, stomach, pancreas, biliary tract, liver, and breast adenocarcinomas. Perhaps the most useful application is the identification of thyroid... (more)

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

IHC: Human pancreatic ductal carcinoma stained with ZR143



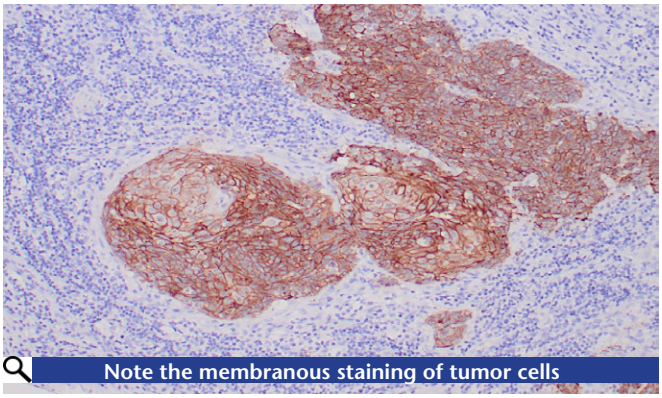
Note the cytoplasmic staining of tumor cells

Desmoglein-3 (clone ZR128) IVD

Recognizes and is specific for 130kDa Desmoglein-3 (DSG3). DSG3 has a very high sensitivity (80%) and specificity (100%) in recognizing squamous cell carcinoma (SqCC). Therefore, DSG3 is considered an important marker for lung SqCC and can be a useful ancillary marker to separate SqCC from other subtypes of lung cancer. Moreover, studies have shown that DSG3 expression in lung SqCC may indicate a poor prognosis. (more)

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

IHC: Human squamous cell carcinoma stained with ZR128



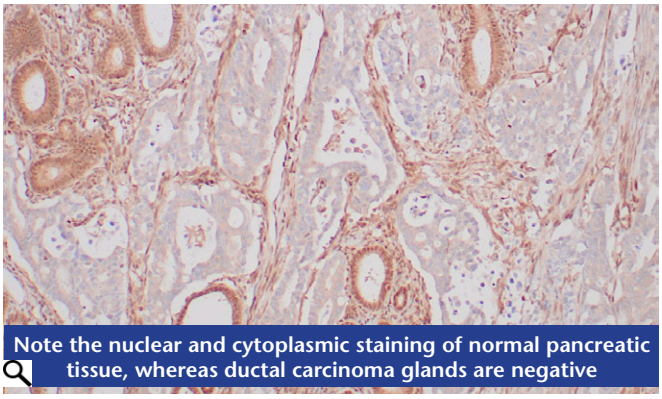
Note the membranous staining of tumor cells

DPC4 (SMAD4) (clone ZR392) IVD

Upon ligand binding, the receptors of the TGF-β family phosphorylate SMAD proteins (SMAD1 and SMAD2). These proteins then move into the nucleus, where they activate transcription. To carry out this function, the receptor activated SMAD1 and SMAD2 require association with DPC4 which is always deleted in pancreatic carcinoma, locus 4, also known as SMAD4. DPC4 is also implicated as a tumor suppressor since it is inactivated in more than half of pancreatic carcinomas and ... (more)

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

IHC: Human pancreatic ductal carcinoma stained with with ZR392



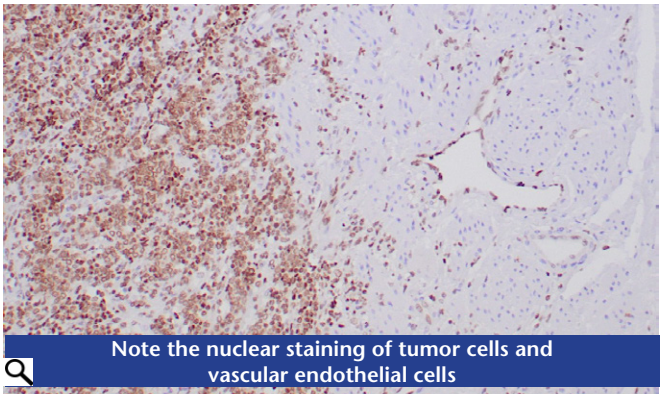
Note the nuclear and cytoplasmic staining of normal pancreatic tissue, whereas ductal carcinoma glands are negative

FLI-1 (clone ZR217) IVD

Recognizes 51kDa FLI1, a member of the ETS family of DNA binding transcription factors, and involved in cellular proliferation and tumorigenesis. ~90% of Ewing's Sarcoma (EWS) / Primitive Neuroectodermal Tumors (PNET) have a specific translocation, t(11;22) (q24;q12), which results in the fusion of EWS to Fli-1, and production of an EWS-Fli-1 fusion protein. Among normal tissues, only endothelial cells and small lymphocytes express Fli-1. Fli-1 is expressed in most vascular tumors, including... (more)

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

IHC: Human Ewing's sarcoma stained with ZR217



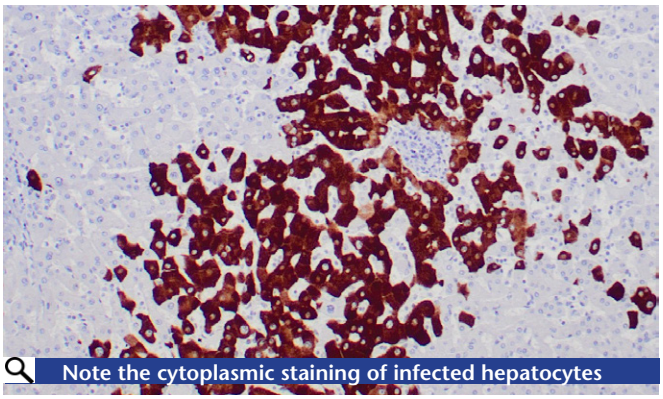
Note the nuclear staining of tumor cells and vascular endothelial cells

HBsAg (clone ZR393) RUO

Hepatitis B surface antigen (HBsAg) is a glycoprotein on the surface of the hepatitis B virus. After hepatitis B infection, HBsAg appears as the first viral marker. HBsAg can be detected in blood, saliva, breast milk, sweat, tears, nasopharyngeal secretions, semen, and vaginal secretions of patients 2 to 6 months after infection with HBV. HBsAg antibodies are mainly used for the diagnosis of the hepatitis B virus.

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

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

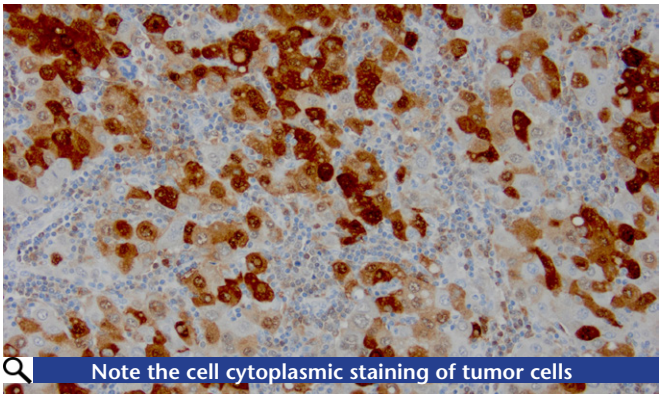

Note the cytoplasmic staining of infected hepatocytes

HSP70 (clone ZR152) IVD

This intronless gene encodes a 70kDa heat shock protein HSP70. In conjunction with other heat shock proteins, it stabilizes existing proteins against aggregation and mediates the folding of newly translated proteins in the cytosol and organelles. It is also involved in the ubiquitin-proteasome pathway through interaction with the AU-rich element RNA-binding protein 1. The gene is located in the major histocompatibility complex class III region, in a cluster with two closely related genes that encode similar proteins.

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

IHC: Human hepatocellular carcinoma stained with ZR152

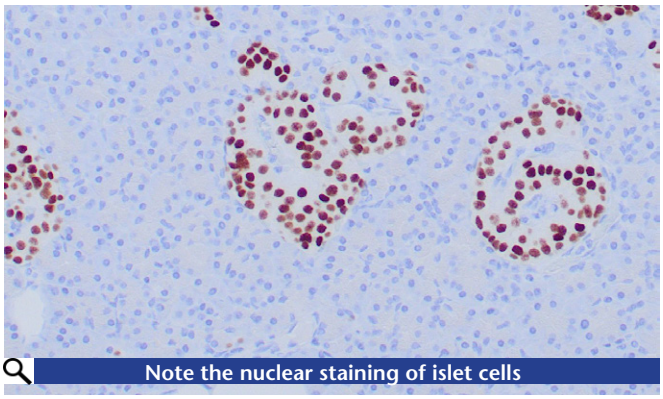

Note the cell cytoplasmic staining of tumor cells

INSM1 (clone ZR395) IVD

Insulinoma-associated protein 1 (INSM1) is a developmentally regulated zinc-finger transcription factor. It localizes to the nucleus and is expressed in embryonic tissues undergoing neuroendocrine differentiation. INSM1 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, compared with 75% and 78% with the combined panel of ... (more)

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

IHC: Human pancreas stained with ZR395

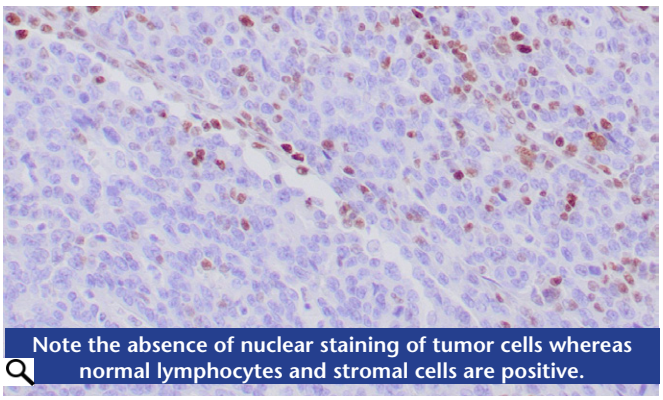

Note the nuclear staining of islet cells

MSH6 (clone ZR342) IVD

The finding that mutations in DNA mismatch repair genes are associated with hereditary nonpolyposis colorectal cancer (HNPCC) has resulted in considerable interest in understanding the mechanism of DNA mismatch repair. Initially, inherited mutations in the MSH2 and MLH1 homologs of the bacterial DNA mismatch repair genes mutS and mutL were demonstrated at high frequency in HNPCC and were shown to be associated with microsatellite instability. A member of the mismatch repair family ... (more)

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

IHC: Human colon carcinoma (Lynch) stained with ZR342

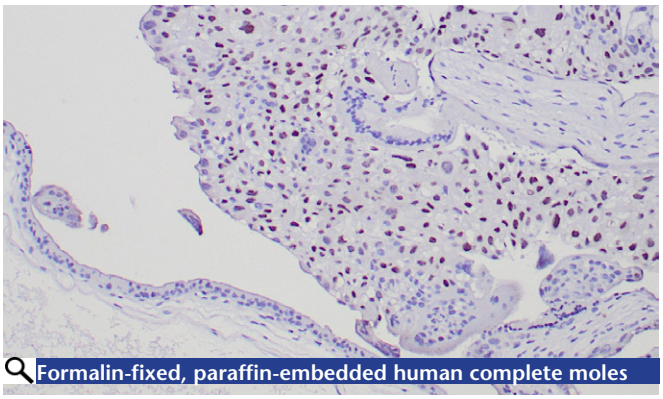

Note the absence of nuclear staining of tumor cells whereas normal lymphocytes and stromal cells are positive.

p57Kip2 (clone ZR230) IVD

Recognizes 57kDa p57Kip2. It shows no cross-reaction with p27Kip1. Anti-p57 has been used as an aid in the identification of complete hydatidiform mole (CHM) (no nuclear labeling of cytotrophoblasts and stromal cells) from partial hydatidiform mole (PHM) in which both 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, whereas most... (more)

Species: Rabbit Monoclonal **Cat#:** Z2709

IHC: Human complete moles stained with ZR230

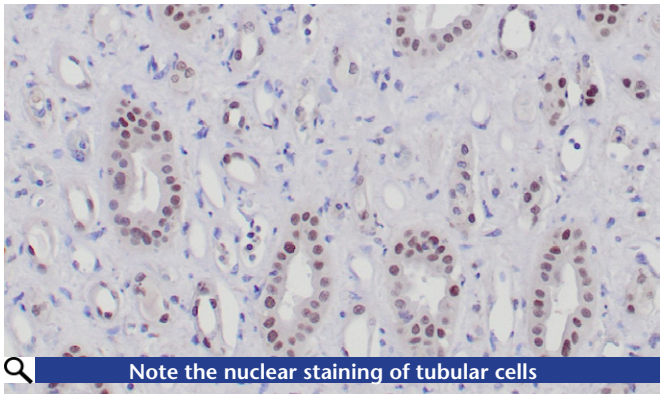

Formalin-fixed, paraffin-embedded human complete moles

PAX-2 (clone ZR224) IVD

42kDa PAX2, a member of the paired box family of transcription factors, which is required for development and proliferation of the kidney, brain, and mullerian organs. In normal adult tissues PAX2 is mainly detected in the urogenital system, including kidney, ureteric epithelium, fallopian tube epithelium, ovary and uterus. In tumors, PAX2 has been detected in renal cell carcinomas, Wilms' tumors, nephrogenic adenomas and papillary serous carcinoma of the ovary. PAX2 has been used as a marker... (more)

Species: Rabbit Monoclonal **Cat#:** Z2741

IHC: Human normal kidney stained with ZR224

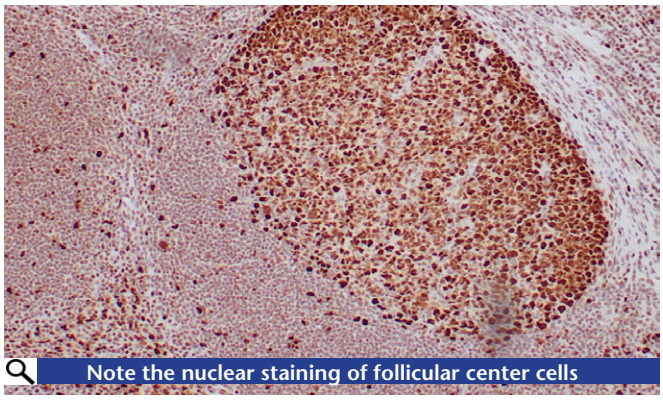

Note the nuclear staining of tubular cells

PCNA (clone ZR378) IVD

Recognizes a non-histone protein of 36kDa, which is identified as proliferating cell nuclear antigen (PCNA). It is also known as cyclin or polymerase delta auxiliary protein. Elevated expression of PCNA/cyclin has been shown in the nucleus during the late G1 phase immediately before the onset of DNA synthesis, becoming maximal during S-phase and declining during G2 and M phases. This MAb is excellent for multiple applications.

Species: Rabbit Monoclonal **Cat#:** Z2669

IHC: Human tonsil stained with ZR378

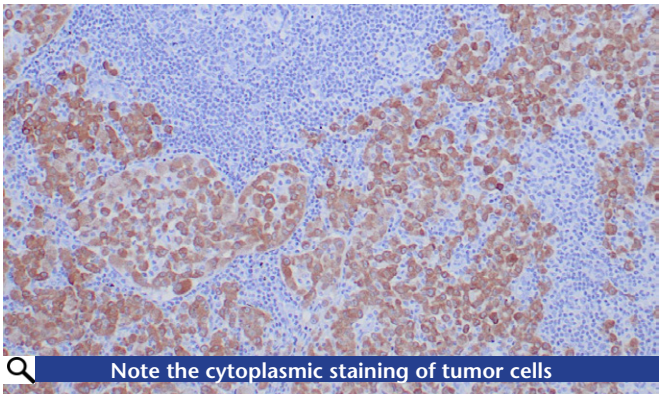

Note the nuclear staining of follicular center cells

ROS1 (clone ZR400) IVD

ROS1, an orphan receptor tyrosine kinase of the insulin receptor family, 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. The first oncogenic fusion of ROS1, FIG-ROS1, was initially identified by ... (more)

Species: Rabbit Monoclonal **Cat#:** Z2756

IHC: Human node with metastatic lung adenocarcinoma stained with ZR400

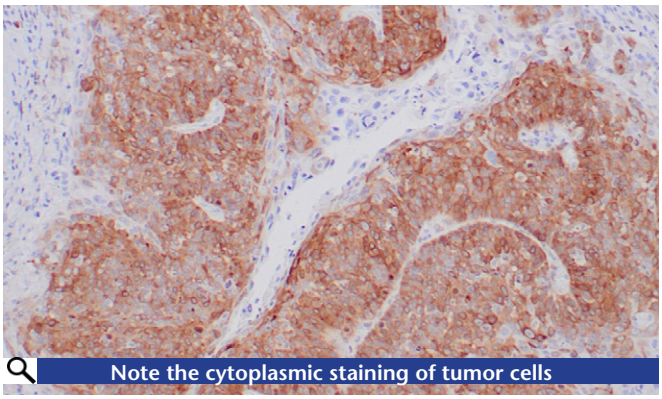

Note the cytoplasmic staining of tumor cells

RRM1 (clone ZR114) IVD

Ribonucleotide reductase M1 polypeptide (RRM1) is one of two non-identical subunits for ribonucleoside-diphosphate reductase, an enzyme that catalyzes the biosynthesis of deoxyribonucleotides from the corresponding ribonucleotides. It provides the precursors necessary for DNA synthesis. RRM1 is present throughout the cell division cycle but downregulated in quiescent cells. RRM1 is involved in carcinogenesis, tumor progression, and the response of non-small-cell lung cancer (NSCLC) to chemotherapy.

Species: Rabbit Monoclonal **Cat#:** Z2418

IHC: Human head and neck small cell carcinoma stained with ZR114



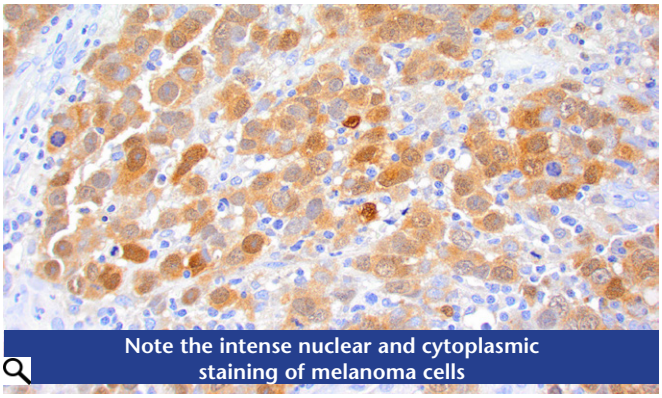
Note the cytoplasmic staining of tumor cells

S-100B (clone ZR379) IVD

This antibody can be used to localize S-100A and S-100B in various tissue sections. S-100 protein has been found in normal melanocytes, Langerhans cells, histiocytes, chondrocytes, lipocytes, skeletal and cardiac muscle, Schwann cells, epithelial and myoepithelial cells of the breast, salivary and sweat glands, as well as in glial cells. Neoplasms derived from these cells also express S-100 protein, albeit non-uniformly. A large number of well-differentiated tumors of the salivary gland, adipose and... (more)

Species: Rabbit Monoclonal **Cat#:** Z2670

IHC: Human melanoma stained with ZR379



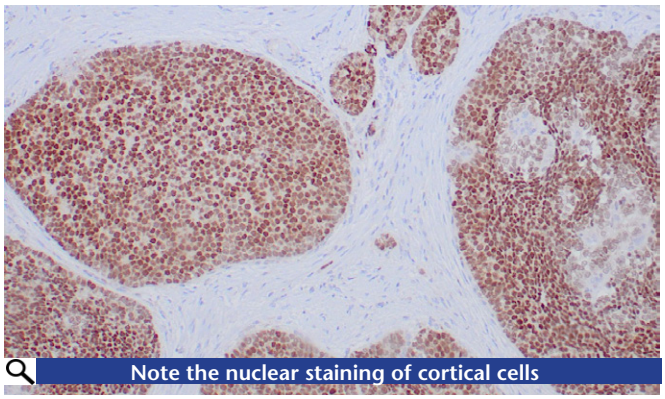
Note the intense nuclear and cytoplasmic staining of melanoma cells

Steroidogenic Factor 1 (clone ZR397) IVD

Steroidogenic Factor 1 (SF-1) is considered an orphan nuclear receptor that belongs to subfamily 5 and is a regulator of steroidogenic enzyme gene expression. Oxysterols are suggested as its ligands. It 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 and 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



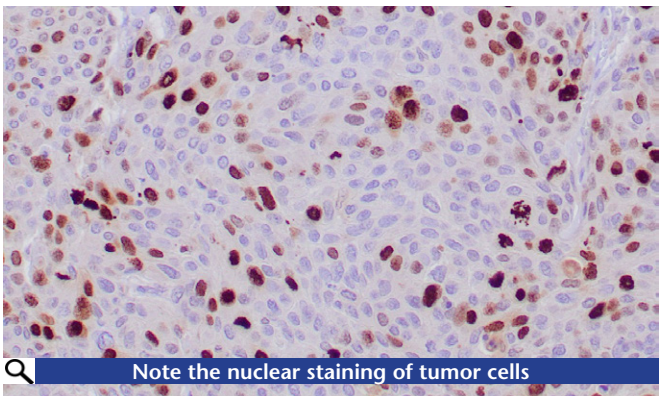
Note the nuclear staining of cortical cells

Topoisomerase II alpha (clone ZR94) RUO

The topoisomerase II alpha isoform is a 170kDa nuclear protein and plays an important role in DNA synthesis and RNA transcription, as well as chromosomal segregation during mitosis. Topoisomerase II alpha is a sensitive and specific marker of late S-, G2- & M-phases in transformed and developmentally regulated normal cells and has been shown to be over-expressed in many human cancers. Decreased expression of Topoisomerase II alpha is the predominant mechanism of resistance to several chemotherapeutic agents.

Species: Rabbit Monoclonal **Cat#:** Z2404

IHC: Human squamous cell carcinoma stained stained with ZR94



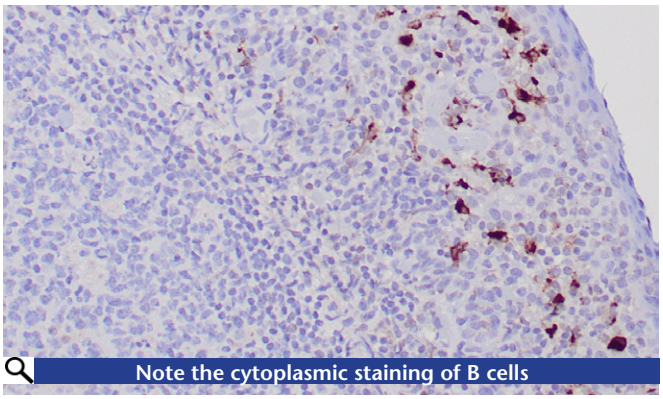
Note the nuclear staining of tumor cells

TRAcP (clone ZR234) IVD

It recognizes tartrate-resistant acid phosphatase (35kDa) (TRAcP). It exists as two isoforms (5a and 5b). This MAb reacts with both the isoforms. Serum TRAcP 5b 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. It is the most basic of the acid phosphatases and is the only form not inhibited by L(+)-tartrate. Expression of TRAcP is increased in certain pathological conditions such as Leukemic Reticuloendotheliosis... (more)

Species: Rabbit Monoclonal **Cat#:** Z2714

IHC: Human tonsil stained with ZR234

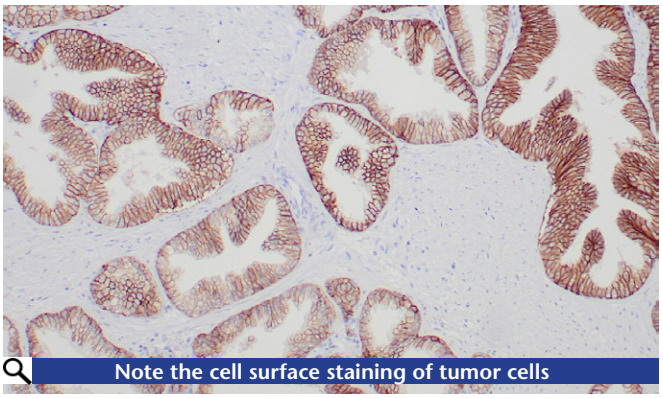

Note the cytoplasmic staining of B cells

TROP2 (clone ZR388) IVD

TROP2/TACSTD2 is a cell surface glycoprotein receptor and single-pass type I membrane protein containing one thyroglobulin type-1 domain, an epidermal growth factor-like repeat, a phosphatidylinositol binding site, and tyrosine phosphorylation sites near the C-terminus. It plays a role in transducing intracellular calcium signals. It is expressed in trophoblast cells, cornea, and multi-stratified epithelia. It is also highly expressed in several types of tumors and is involved in regulating the growth of carcinoma cells.

Species: Rabbit Monoclonal **Cat#:** Z2744

IHC: Human colon carcinoma stained with ZR388

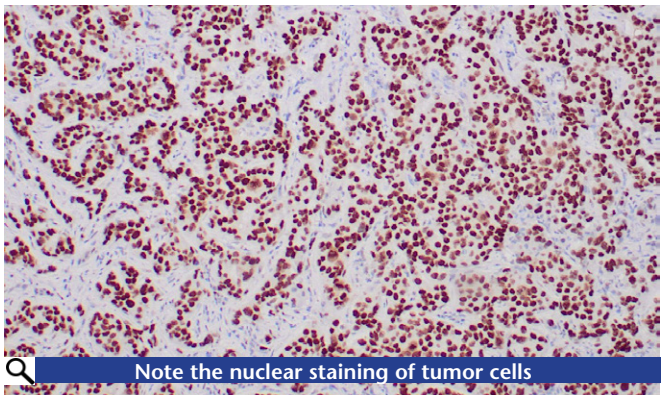

Note the cell surface staining of tumor cells

TRPS1 (clone ZR382) IVD

TRPS1, named for its association with the autosomal dominant genetic disorder TRPS1, 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. (more)

Species: Rabbit Monoclonal **Cat#:** Z2673

IHC: Human breast carcinoma stained with ZR382

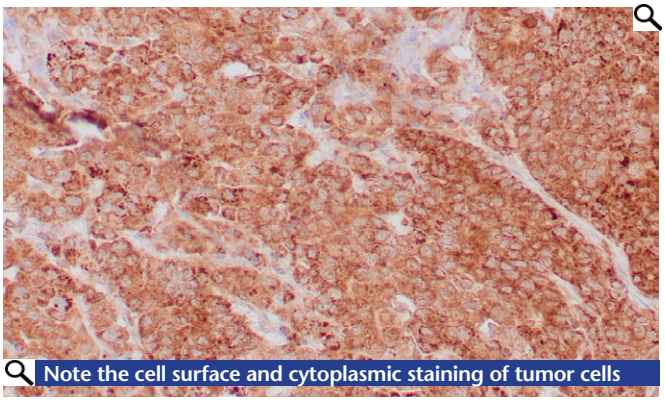

Note the nuclear staining of tumor cells

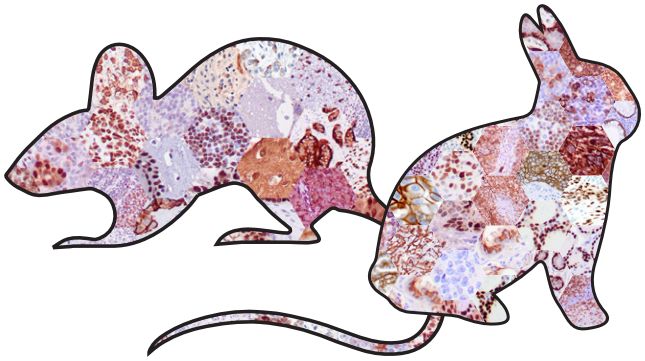
VEGF (clone ZR389) IVD

This MAb recognizes proteins of 19-22kDa (reducing) and 38kDa-44kDa (non-reducing), identified as various isoforms of Vascular Endothelial Growth Factor or Vascular Permeability Factor (VEGF/VPF). It is highly specific to VEGF, which is a homodimeric, disulfide-linked glycoprotein with close homology to platelet-derived growth factor (PDGF). VEGF/VPF plays an important role in angiogenesis, which promotes tumor progression and metastasis. (more)

Species: Rabbit Monoclonal **Cat#:** Z2745

IHC: Human breast carcinoma stained with ZR389


Note the cell surface and cytoplasmic staining of tumor cells



ZETA Corporation

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

P.O. Box 282
Sierra Madre, CA
91025-0285 USA

CE/IVD