

## AMACR (P504S) (Clone ZM193 ) Mouse Monoclonal Antibody

**Specificity:** Human. Other not tested

**Immunogen:** Recombinant human AMACR protein fragment (around aa 297-394)

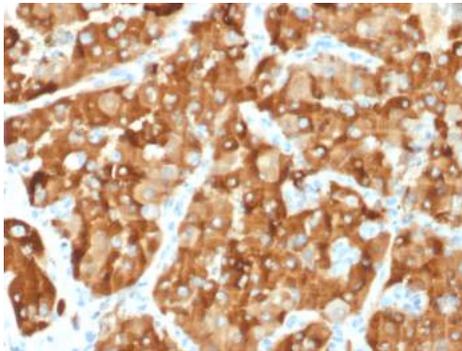
**Ig Class:** IgG1/ $\kappa$

**Storage:** Store at 2-8°C for up to 2 years for concentrate form and 1 year for predilute form

**Staining procedures:** Use formalin-fixed and paraffin-embedded sections. *Retrieval conditions:* Pretreatment of deparaffinized tissue with heat-induced epitope retrieval is recommended. *Detection methods:* Polymer anti-mouse/rabbit IgG detection system. *Working dilution:* 1:100-200; *Positive Control:* Prostate carcinoma. *Cellular Localization:* Cytoplasmic; *Intended Use:* Analyte specific reagent (ASR).

**Application:** This antibody recognizes a protein of 42kDa, which is identified as AMACR, also known as p504S. It is an enzyme that is involved in bile acid biosynthesis and  $\beta$ -oxidation of branched-chain fatty acids. AMACR is essential in lipid metabolism. It is expressed in cells of premalignant high-grade prostatic intraepithelial neoplasia (HGPIN) and prostate adenocarcinoma. The majority of the carcinoma cells show a distinct granular cytoplasmic staining reaction. AMACR is present at low or undetectable levels in glandular epithelial cells of normal prostate and benign prostatic hyperplasia. A spotty granular cytoplasmic staining is seen in a few cells of the benign glands. AMACR is expressed in normal liver (hepatocytes), kidney (tubular epithelial cells) and gall bladder (epithelial cells). Expression has also been found in lung (bronchial epithelial cells) and colon (colonic surface epithelium). AMACR expression can also be found in hepatocellular carcinoma and kidney carcinoma. Past studies have also shown that AMACR is expressed in various colon carcinomas (well, moderately and poorly differentiated) and over expressed in prostate carcinoma.

**Supplied As:** Purified antibody in 0.2% BSA and 15mM sodium azide.



#### References:

1. Xu J, et al. *Canc Res.* 2000; 60:1677
2. Jiang Z, et al. *Hum Pathol.* 2003; 34:792
3. Jiang Z, et al. *Am J Surg Pathol.* 2001; 25:1397

*Formalin-fixed, paraffin-embedded human papillary renal cell carcinoma stained anti-AMACR antibody using peroxidase-conjugate and DAB chromogen. Note cytoplasmic staining of carcinoma cells*

Cat #: Z2374 (1.0 ml)