

36-2323: Anti-AMACR / p504S (Prostate Cancer Marker) Monoclonal Antibody(Clone: AMACR/1864)

Clonality :	Monoclonal
Clone Name :	AMACR/1864
Application :	WB,IHC
Reactivity :	Human
Gene :	AMACR
Gene ID :	23600
Uniprot ID :	Q9UHK6
Alternative Name :	Alpha-methylacyl-CoA Racemase, CBAS4, Da1-8, Macr1, RACE, RM
Isotype :	Mouse IgG1, kappa
Immunogen Information :	Recombinant human AMACR protein fragment (around aa 297-394) (exact sequence is proprietary)

Description

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 -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.

Product Info

Amount :	20 µg / 100 µg
Content :	200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage condition :	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

Application Note

Western Blot (1-2ug/ml); Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes);

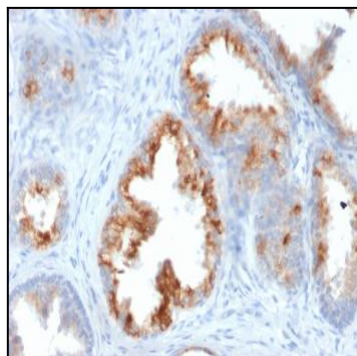


Fig. 1: Formalin-fixed, paraffin-embedded human Prostate Carcinoma stained with AMACR / p504S Mouse Monoclonal Antibody (AMACR/1864).

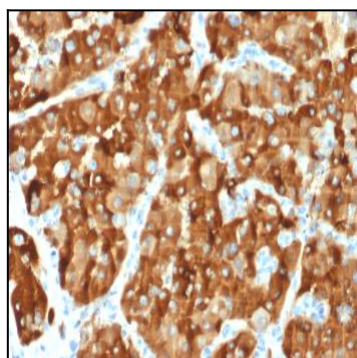


Fig. 2: Formalin-fixed, paraffin-embedded human Renal Cell Carcinoma stained with AMACR / p504S Mouse Monoclonal Antibody (AMACR/1864).

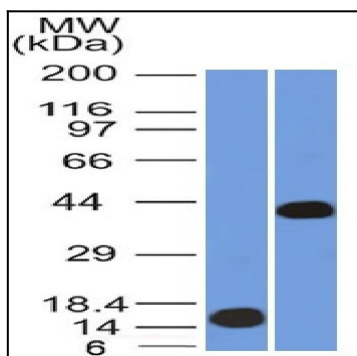


Fig. 3: Western Blot (1) Recombinant AMACR and (2) Human Kidney lysate using AMACR / p504S Mouse Monoclonal Antibody (AMACR/1864).

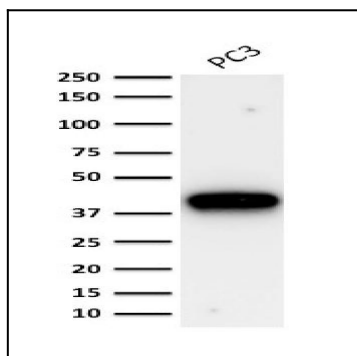


Fig. 4: Western Blot of Human Prostate Cancer PC3 cell lysate AMACR / p504S Mouse Monoclonal Antibody (AMACR/1864).

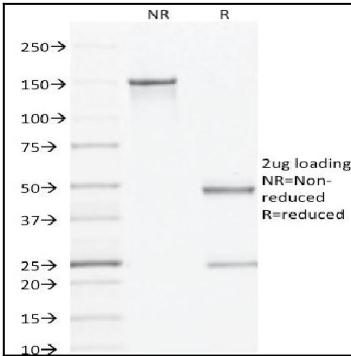


Fig. 5: SDS-PAGE Analysis Purified AMACR / p504S Mouse Monoclonal Antibody (AMACR/1864). Confirmation of Integrity and Purity of Antibody.

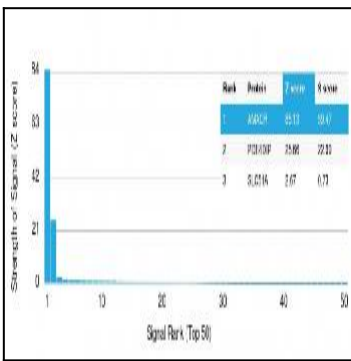


Fig. 6: Analysis of Protein Array containing more than 19,000 full-length human proteins using AMACR / p504S Mouse Monoclonal Antibody (AMACR/1864). Z- and S-Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.