



# **AMACR / p504S Antibody (Prostate Cancer Marker)**

Catalog No: tcna10949



#### **Available Sizes**

Size: 20ug

**Size:** 100ug



## **Specifications**

#### **Application:**

IHC-P, WB

## **Species Reactivity:**

Human. Other species not known.

#### **Host Species:**

Mouse

#### Immunogen / Amino acids:

A portion of amino acids 297-394 was used as the immunogen for the AMACR antibody.

## **Clonality:**

Mouse Monoclonal Specificity-Validated by Human Protein Microarray

#### **Clones:**

**AMACR/1864** 

#### **Isotype:**

Mouse IgG1, kappa

#### **Storage Buffer:**

0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide

## **Recommended Dilution:**

Western blot: 0.5-1ug/ml

IHC (FFPE): 1-2ug/ml for 30 min at RT

Prediluted IHC only format: incubate for 30 min at RT (1)





#### **Storage Instruction:**

Store the AMACR antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

#### **SwissProt:**

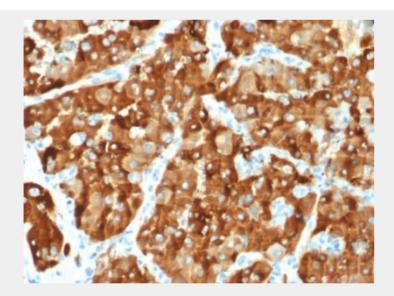
Q9UHK6

### References

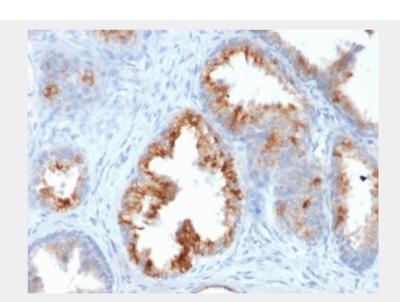
Protein G affinity chromatography

## **Product Description**

This antibody recognizes a protein of 43kDa, 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.



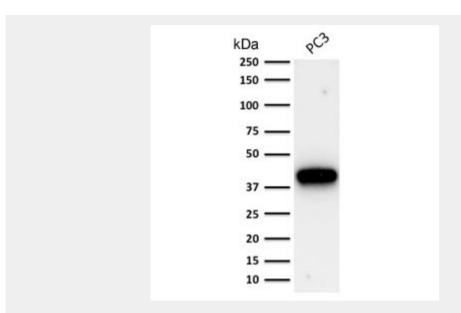
IHC testing of FFPE human renal carcinoma with AMACR antibody. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



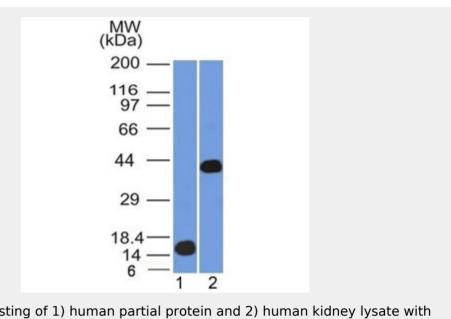
IHC testing of FFPE human prostate carcinoma with AMACR antibody. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



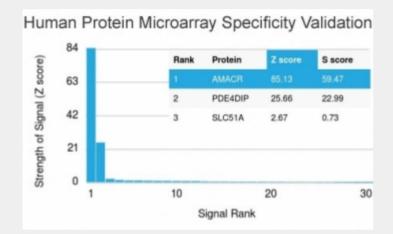




Western blot testing of human PC-3 cell lysate with AMACR antibody. Predicted molecular weight  $\sim\!43~\text{kDa}.$ 

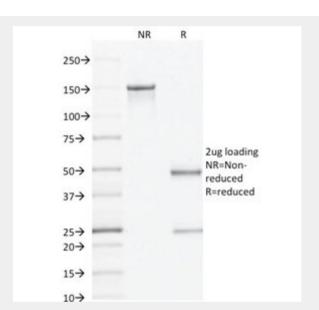


Western blot testing of 1) human partial protein and 2) human kidney lysate with AMACR antibody. Predicted molecular weight  $\sim$ 43 kDa.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using AMACR antibody (clone AMACR/1864). These results demonstrate the foremost specificity of the AMACR/1864 mAb.

Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free AMACR antibody (clone AMACR/1864) as confirmation of integrity and purity.

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!