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Anti-AMACR / p504S (Prostate Cancer Marker) Antibody
Mouse Monoclonal Antibody
Catalog # AH13243

Specification

Anti-AMACR / p504S (Prostate Cancer Marker) Antibody - Product Information

Application	**IHC-P, IF**
Primary Accession	Q9UHK6
Other Accession	508343
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse / IgG**
Calculated MW	**42387**

Anti-AMACR / p504S (Prostate Cancer Marker) Antibody - Additional Information

Gene ID 23600

Other Names
Alpha-methylacyl-CoA Racemase, CBAS4, Da1-8, Macr1, RACE, RM

Application Note
IHC-P~~N/A<br \>IF~~1:50~200

Format
200ug/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
Store at 2 to 8°C.Antibody is stable for 24 months.

Precautions
Anti-AMACR / p504S (Prostate Cancer Marker) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-AMACR / p504S (Prostate Cancer Marker) Antibody - Protein Information

Name AMACR

Function
Catalyzes the interconversion of (R)- and (S)-stereoisomers of alpha-methyl-branched-chain fatty acyl-CoA esters (PubMed:10655068, PubMed:11060359, PubMed:7649182). Acts only on coenzyme A thioesters, not on free fatty acids, and accepts as substrates a wide range of alpha-methylacyl-CoAs, including pristanoyl-CoA,

trihydroxycoprostanoyl-CoA (an intermediate in bile acid synthesis), and arylpropionic acids like the anti-inflammatory drug ibuprofen (2- (4-isobutylphenyl)propionic acid) but neither 3-methyl-branched nor linear-chain acyl-CoAs (PubMed:10655068, PubMed:11060359, PubMed:7649182).

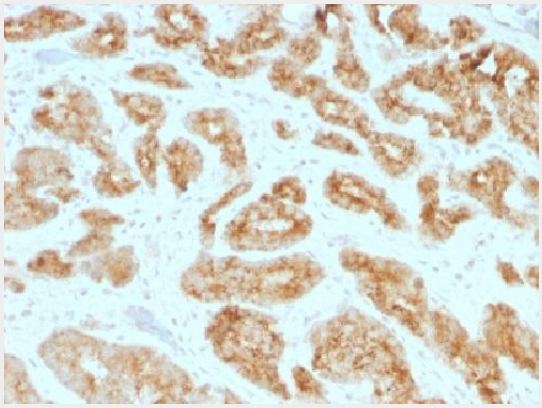
Cellular Location
Peroxisome. Mitochondrion

Anti-AMACR / p504S (Prostate Cancer Marker) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-AMACR / p504S (Prostate Cancer Marker) Antibody - Images



Formalin-fixed, paraffin-embedded human Prostate Carcinoma Stained with AMACR / p504S Monoclonal Antibody (AMACR/1723)

Anti-AMACR / p504S (Prostate Cancer Marker) Antibody - Background

This antibody recognizes a protein of 54kDa, which is identified as AMACR, also known as p504S. It is an enzyme that is involved in bile acid biosynthesis and β-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.