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Anti-AMACR / p504S (Prostate Cancer Marker) Antibody

Mouse Monoclonal Antibody
Catalog # AH13243

Product Information

Application	IHC-P, IF
Primary Accession	Q9UHK6
Other Accession	508343
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG
Clone Names	AMACR/1723
Calculated MW	42387

Additional Information

Gene ID	23600
Other Names	Alpha-methylacyl-CoA Racemase, CBAS4, Da1-8, Macr1, RACE, RM
Application Note	Immunofluorescence (1-2ug/ml); ,Immunohistology (Formalin-fixed) (1-2ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
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.

Protein Information

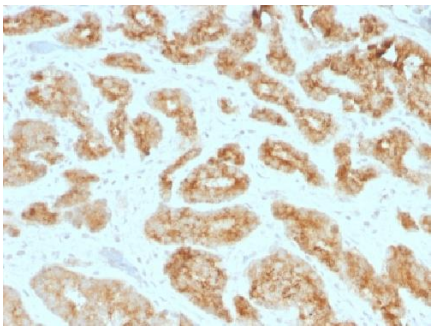
Name	AMACR
Function	Catalyzes the interconversion of (R)- and (S)-stereoisomers of alpha-methyl-branched-chain fatty acyl-CoA esters (PubMed:10655068, PubMed:11060359, PubMed:11893780, PubMed:7649182). Acts only on coenzyme A thioesters, not on free fatty acids, and accepts as substrates a wide range 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

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.

Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.