

Rabbit Anti-AMACR antibody

SL0840R

Product Name:	AMACR
Chinese Name:	α-甲基酰基辅酶A消旋酶抗体
Alias:	2 arylpropionyl CoA epimerase; 2 methylacyl CoA racemase; 2-methylacyl-CoA racemase; Alpha methylacyl-CoA racemase deficiency, included; Alpha-methylacyl- CoA racemase; alpha-methylacyl-CoA racemase isoform 1; P504S; Amacr; AMACR; AMACR deficiency, included; CBAS4; P504S; RACE; 2 arylpropionyl CoA epimerase; Alpha methylacyl Coenzyme A racemase; Alpha methylacyl CoA racemase; AMACR_HUMAN; EC 5.1.99.4; Da1-8; RACE; RM; Macr 1; Macr1; Methylacyl CoA racemase alpha.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	42kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from mouse AMACR:1-100/381
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	alpha-methylacyl-CoA racemase(AMACR/P504S) is Prostate-specific antigen (PSA)

screening for prostate cancer is now widespread in the United States among men of all ages. However PSA has limited specificity because benign disease, including prostatic enlargement and inflammation, can increase PSA levels. Thus, a more specific prostate cancer markers is needed. One such potential marker is AMACR, an enzyme that is involved in peroxisomal beta-oxidation of dietary branched-chain fatty acids. Recent studies have shown that, compared with expression in normal or benign prostate epithelium, AMACR is consistently overexpressed in prostate cancer epithelium, making it a specific marker for cancer cells within the prostate gland. Furthermore, overexpression of AMACR may increase the risk of prostate cancer because its expression is increased in premalignant lesions (prostatic intraepithelial neoplasia).

Function:

Racemization of 2-methyl-branched fatty acid CoA esters. Responsible for the conversion of pristanoyl-CoA and C27-bile acyl-CoAs to their (S)-stereoisomers.

Subcellular Location: Peroxisome. Mitochondrion.

DISEASE:

Alpha-methylacyl-CoA racemase deficiency (AMACRD) [MIM:614307]: A rare autosomal recessive peroxisomal disorder characterized by elevated plasma concentrations of pristanic acid C27-bile-acid intermediates, and adult onset of variable neurodegenerative symptoms affecting the central and peripheral nervous systems. Features may include seizures, visual failure, sensorimotor neuropathy, spasticity, migraine, and white matter hyperintensities on brain imaging. Note=The disease is caused by mutations affecting the gene represented in this entry. Congenital bile acid synthesis defect 4 (CBAS4) [MIM:214950]: A disorder characterized by the presence of trihydroxycoprostanic acid in the bile and absence of cholic acid. Patients manifest neonatal jaundice, intrahepatic cholestasis and bile duct deficiency. Note=The disease is caused by mutations affecting the gene represented in this entry.

Similarity:

Belongs to the CaiB/BaiF CoA-transferase family.

SWISS: Q9UHK6

Gene ID:

23600

Database links:

Entrez Gene: 23600Human

<u>Omim: 604489</u>Human

SwissProt: Q9UHK6Human
Unigene: 508343Human
Important Note:
This product as supplied is intended for research use only, not for use in human,
therapeutic or diagnostic applications.
AMACR的优点在于它是癌症特异性,在癌症组织中高表达。
AMACR亦可用作其他癌症的诊断Maker。对各种癌症细胞进行检查后发现,结肠
直肠癌、卵巢癌、乳腺癌、膀胱癌、肺癌、淋巴瘤和黑素瘤都过度表达AMACR,以
结肠直肠癌和前列腺癌表达最高。
AMACR是一种新型前列腺癌标记物,在前列腺癌中胞浆表达较多,正常表到较少。