

Mouse Anti-AMACR antibody

SLM-33053M

Product Name AMACR

Chinese Name α -甲基酰基辅酶 A 消旋酶单克隆抗体

Alias Alpha-methylacyl-CoA racemase; 2-methylacyl-CoA racemase; RM; RACE; CBAS4; P504S; AMACRD; AMACR_HUMAN;

Research Area Tumour Cell biology immunology Signal transduction The new supersedes the old Epigenetics

Immunogen Species Mouse

Clonality Monoclonal

Clone NO. 6B3

React Species Human,Mouse(predicted:Rat)

WB=1:500-1000 (Paraffin sections need antigen repair)

Applications not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 42kDa

Cellular localization cytoplasmic

Form Liquid

Concentration 1mg/ml

immunogen Recombinant human AMACR protein: full length

Lsotype IgG

Purification affinity purified by Protein G

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PubMed [PubMed](#)

Product This gene encodes a racemase. The encoded enzyme interconverts pristanoyl-CoA and

Detail

C27-bile acylCoAs between their (R)- and (S)-stereoisomers. The conversion to the (S)-stereoisomers is necessary for degradation of these substrates by peroxisomal beta-oxidation. Encoded proteins from this locus localize to both mitochondria and peroxisomes. Mutations in this gene may be associated with adult-onset sensorimotor neuropathy, pigmentary retinopathy, and adrenomyeloneuropathy due to defects in bile acid synthesis. Alternatively spliced transcript variants have been described. Read-through transcription also exists between this gene and the upstream neighboring C1QTNF3 (C1q and tumor necrosis factor related protein 3) gene. [provided by RefSeq, Mar 2011]

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: 23600](#) Human

[Omim: 604489](#) Human

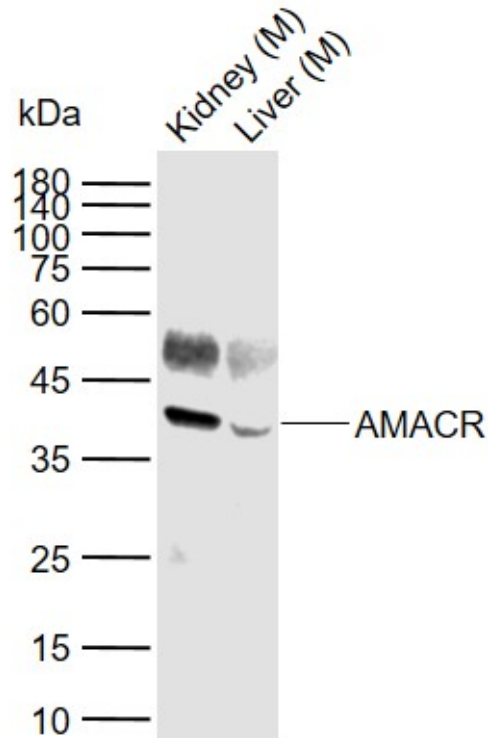
[SwissProt: Q9UHK6](#) Human

[Unigene: 508343](#) Human

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 Marker。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。

**Product
Picture**



Sample:

Lane 1: Mouse Kidney tissue lysates

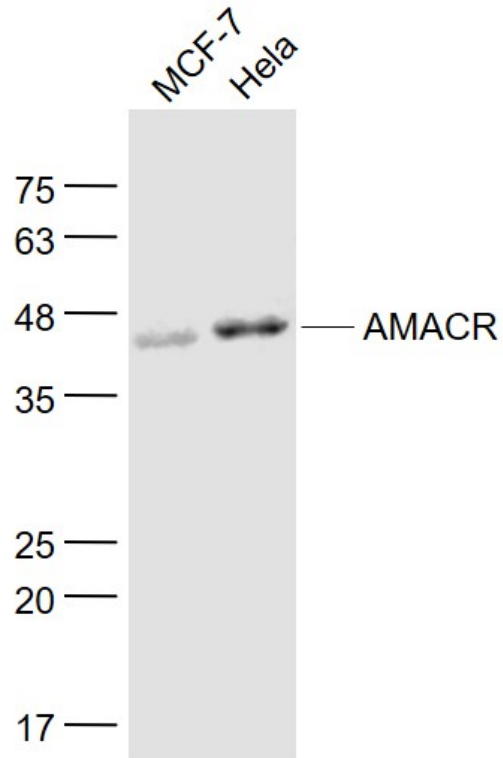
Lane 2: Mouse Liver tissue lysates

Primary: Anti- AMACR (SLM-33053M) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti- Mouse IgG at 1/20000 dilution

Predicted band size: 42 kDa

Observed band size: 42 kDa



Sample:

MCF-7(Human) Cell Lysate at 30 ug

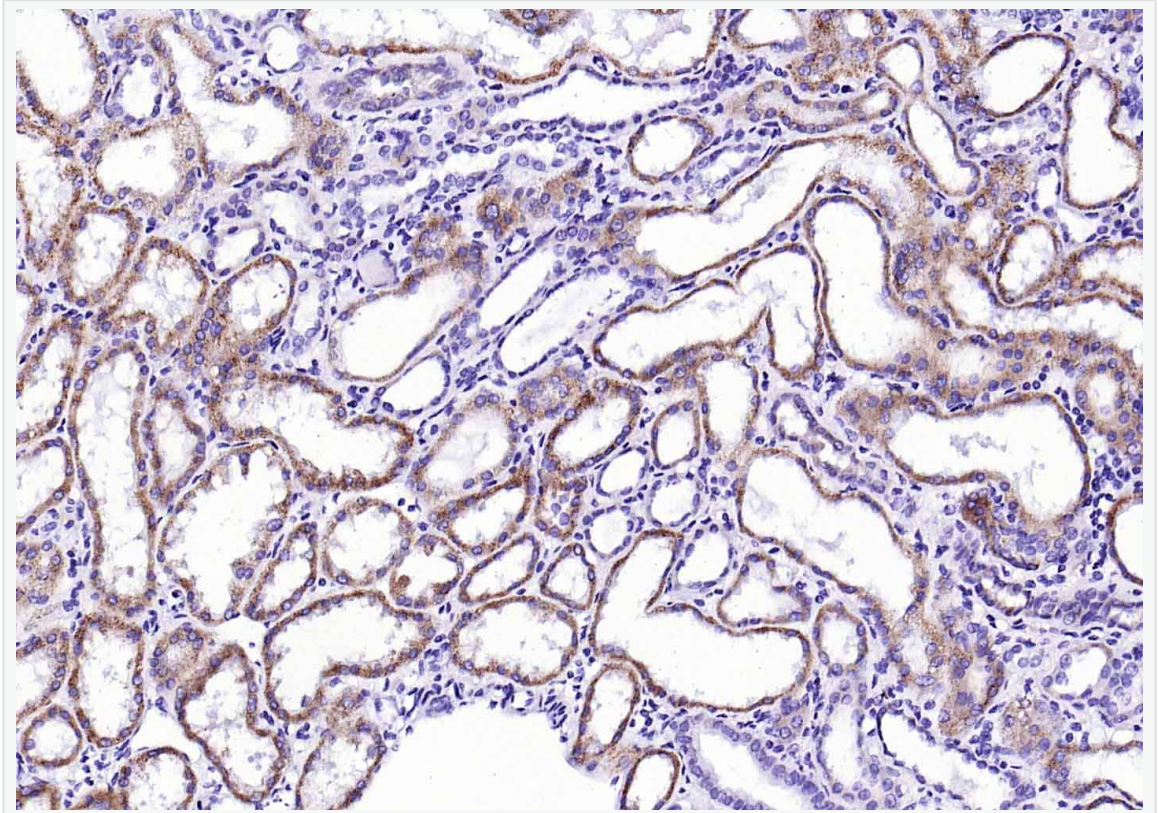
HeLa(Human) Cell Lysate at 30 ug

Primary: Anti- AMACR (SLM-33053M) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution

Predicted band size: 42 kD

Observed band size: 42 kD



Paraformaldehyde-fixed, paraffin embedded (Human kidney carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (AMACR) Monoclonal Antibody, Unconjugated (SLM-33053M) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructions and DAB staining.