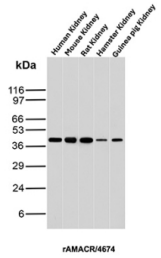
Recombinant AMACR Antibody [clone rAMACR/4674] (V8645)

Catalog No.	Formulation	Size
V8645-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8645-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8645SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

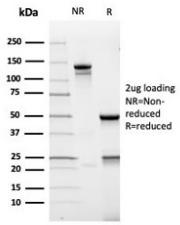
Recombinant MOUSE MONOCLONAL

Bulk quote request

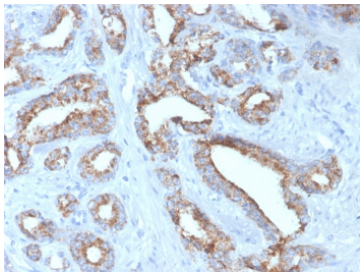
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat, Hamster, Guinea pig
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG2a, kappa
Clone Name	rAMACR/4674
Purity	Protein G affinity chromatography
UniProt	Q9UHK6
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT (Human) Western Blot : 2-4ug/ml (Human/Mouse/Rat/Hamster/Guinea pig)
Limitations	This recombinant AMACR antibody is available for research use only.



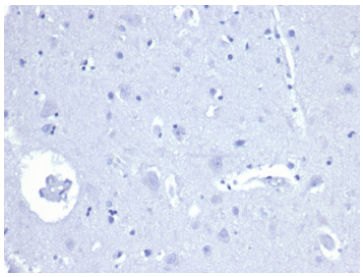
Recombinant AMACR Antibody Kidney Tissue WB. Western blot analysis of human, mouse, rat, hamster, and guinea pig kidney tissue lysates using Recombinant AMACR Antibody clone rAMACR/4674 demonstrates a consistent band at approximately 42 kDa, corresponding to the predicted molecular weight of Alpha-methylacyl-CoA racemase / AMACR. The conserved banding pattern across multiple species supports recognition of AMACR, a peroxisomal and mitochondrial metabolic enzyme involved in branched-chain fatty acid and bile acid metabolism.



SDS-PAGE analysis of purified, BSA-free recombinant AMACR antibody (clone rAMACR/4674) as confirmation of integrity and purity.



Recombinant AMACR Antibody Prostate Carcinoma IHC. Immunohistochemistry staining of FFPE human prostate carcinoma tissue with recombinant AMACR Antibody / Alpha-methylacyl-CoA racemase Antibody clone rAMACR/4674 demonstrates strong granular cytoplasmic HRP-DAB brown staining in malignant glandular epithelial cells, consistent with the established expression pattern of AMACR in prostatic adenocarcinoma. The staining highlights neoplastic glandular architecture while surrounding stromal elements show comparatively minimal background signal. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Recombinant AMACR Antibody Human Brain Negative Control IHC. Immunohistochemistry analysis of formalin-fixed, paraffin-embedded human brain tissue using recombinant AMACR Antibody / Alpha-methylacyl-CoA racemase Antibody clone rAMACR/4674 demonstrates minimal background staining, consistent with the low expected expression of AMACR in normal brain tissue. The absence of significant HRP-DAB brown signal supports staining specificity relative to strongly positive carcinoma tissues. HIER: Tris/EDTA, pH9.0, 45 min. Secondary detection: HRP-polymer, 30 min. DAB development: 5 min.

Description

Recombinant AMACR Antibody recognizes a protein of 42kDa, 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.

For additional AMACR and p504S research antibodies validated by protein microarray specificity analysis, western blotting, and immunohistochemistry, explore the broader AMACR Antibody page featuring clone AMACR/1864.

Application Notes

Optimal dilution of the recombinant AMACR antibody should be determined by the researcher.

Immunogen

Recombinant full-length human AMACR protein was used as the immunogen for the recombinant AMACR antibody.

Storage

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