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AMACR Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10110b

Product Information

Application	WB, IHC-P, FC, IF, E
Primary Accession	Q9UHK6
Other Accession	NP_976316.1
Reactivity	Human
Predicted	Bovine, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18736
Calculated MW	42387
Antigen Region	323-351

Additional Information

Gene ID	23600
Other Names	Alpha-methylacyl-CoA racemase, 2-methylacyl-CoA racemase, AMACR
Target/Specificity	This AMACR antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 323-351 amino acids from the C-terminal region of human AMACR.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	AMACR Antibody (C-term) 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

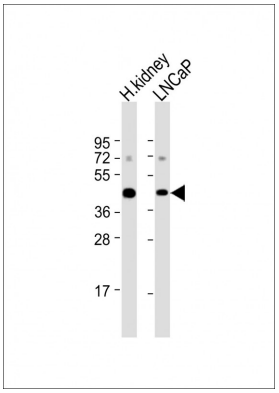
Background

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

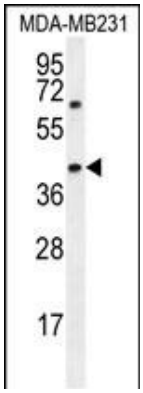
References

Murray, N.P., et al. Oncol. Rep. 24(3):687-692(2010) Sonwalkar, S.A., et al. Histopathology 56(7):900-907(2010) Lakis, S., et al. World J. Gastroenterol. 16(20):2476-2483(2010) Chen, W., et al. Mol. Biol. Rep. 36(3):423-430(2009) Mubiru, J.N., et al. Gene 327(1):89-98(2004)

Images

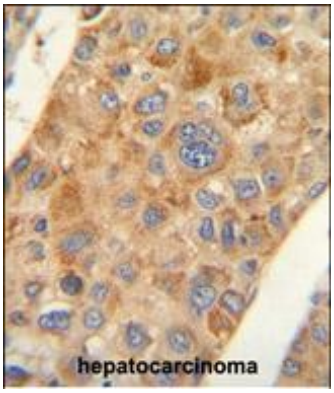


All lanes : Anti-AMACR Antibody (C-term) at 1:1000 dilution Lane 1: human kidney lysate Lane 2: LNCaP whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 42 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

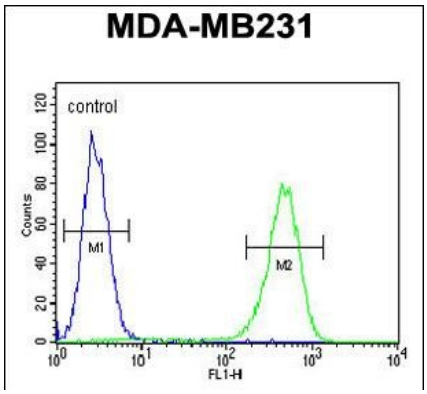


AMACR Antibody (C-term) (Cat. #AP10110b) western blot analysis in MDA-MB231 cell line lysates (35ug/lane).This demonstrates the AMACR antibody detected the AMACR protein (arrow).

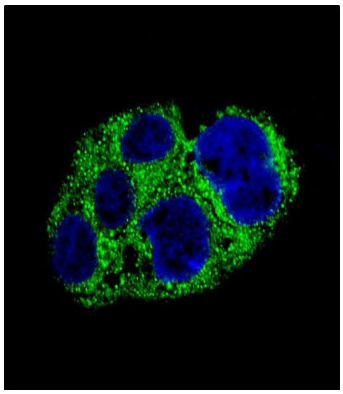
AMACR antibody (C-term) (Cat. #AP10110b) immunohistochemistry analysis in formalin fixed and paraffin embedded human hepatocarcinoma followed by



peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the AMACR antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



AMACR Antibody (C-term) (Cat. #AP10110b) flow cytometric analysis of MDA-MB231 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Confocal immunofluorescent analysis of AMACR Antibody (C-term)(Cat. #AP10110b) with HepG2 cell followed by Alexa Fluor® 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).

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