

**AMACR Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP10110b**

**Specification**

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**AMACR Antibody (C-term) - Product Information**

Application	IF, WB, IHC-P, FC,E
Primary Accession	<a href="#">O9UHK6</a>
Other Accession	<a href="#">NP_976316.1</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	42387
Antigen Region	323-351

**AMACR Antibody (C-term) - 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**

IF~~1:10~50  
WB~~1:1000  
IHC-P~~1:50~100  
FC~~1:10~50

**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.

**AMACR Antibody (C-term) - 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:[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**

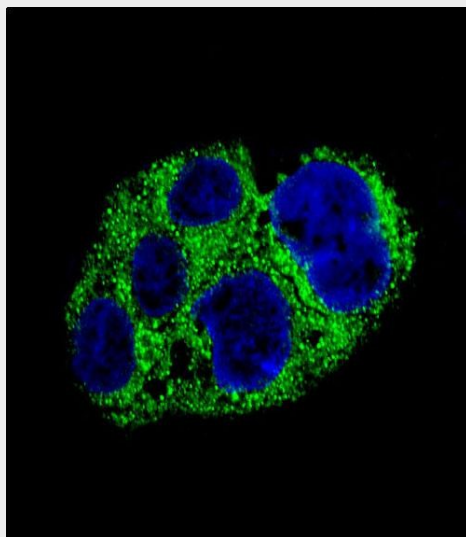
Peroxisome. Mitochondrion

**AMACR Antibody (C-term) - Protocols**

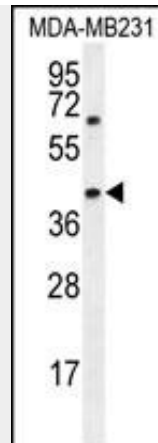
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

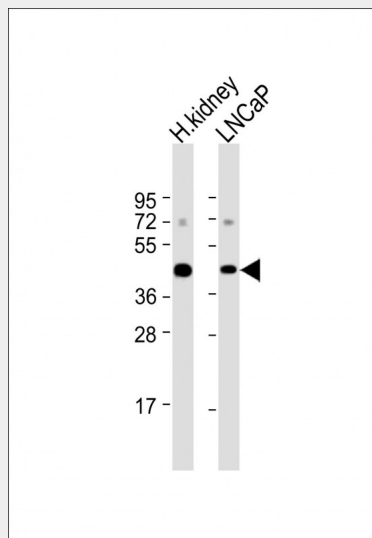
**AMACR Antibody (C-term) - Images**



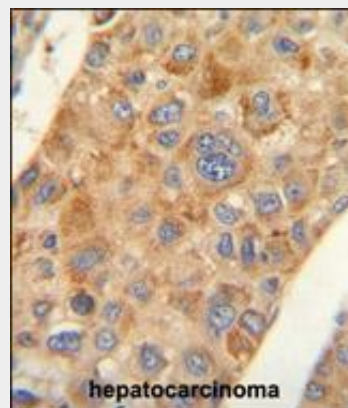
Confocal immunofluorescent analysis of AMACR Antibody (C-term)(Cat. #AP10110b) with HepG2 cell followed by Alexa Fluor® 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



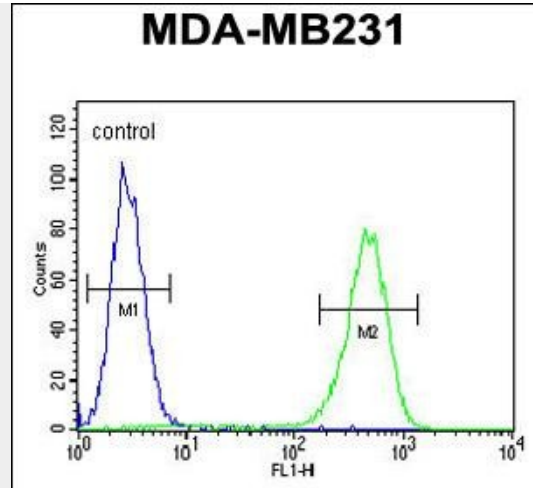
AMACR Antibody (C-term) (Cat. #AP10110b) western blot analysis in MDA-MB231 cell line lysates (35ug/lane). This demonstrates the AMACR antibody detected the AMACR protein (arrow).



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) 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.

#### **AMACR Antibody (C-term) - 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.

#### **AMACR Antibody (C-term) - 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)