

# Anti-AMACR Picoband Antibody

Catalog # ABO12668

## Product Information

---

|                          |                                                                                                                 |
|--------------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB                                                                                                              |
| <b>Primary Accession</b> | <a href="#">Q9UHK6</a>                                                                                          |
| <b>Host</b>              | Rabbit                                                                                                          |
| <b>Reactivity</b>        | Human, Rat                                                                                                      |
| <b>Clonality</b>         | Polyclonal                                                                                                      |
| <b>Format</b>            | Lyophilized                                                                                                     |
| <b>Description</b>       | Rabbit IgG polyclonal antibody for Alpha-methylacyl-CoA racemase(AMACR) detection. Tested with WB in Human;Rat. |
| <b>Reconstitution</b>    | Add 0.2ml of distilled water will yield a concentration of 500ug/ml.                                            |

## Additional Information

---

|                                 |                                                                                                                                                                                                                  |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene ID</b>                  | 23600                                                                                                                                                                                                            |
| <b>Other Names</b>              | Alpha-methylacyl-CoA racemase, 5.1.99.4, 2-methylacyl-CoA racemase, AMACR                                                                                                                                        |
| <b>Calculated MW</b>            | 42387                                                                                                                                                                                                            |
| <b>Application Details</b>      | Western blot, 0.1-0.5 µg/ml, Human, Rat                                                                                                                                                                          |
| <b>Subcellular Localization</b> | Peroxisome . Mitochondrion .                                                                                                                                                                                     |
| <b>Source</b>                   | Eukaryota                                                                                                                                                                                                        |
| <b>Protein Name</b>             | Alpha-methylacyl-CoA racemase                                                                                                                                                                                    |
| <b>Contents</b>                 | Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.                                                                                                                                              |
| <b>Immunogen</b>                | A synthetic peptide corresponding to a sequence in the middle region of human AMACR (208-246aa RGQNMLDGGAPFYTTYRTADGEFMAVGAIEPQFYELLIK), different from the related mouse and rat sequences by four amino acids. |
| <b>Purification</b>             | Immunogen affinity purified.                                                                                                                                                                                     |
| <b>Cross Reactivity</b>         | No cross reactivity with other proteins.                                                                                                                                                                         |
| <b>Storage</b>                  | At -20° C for one year. After reconstitution, at 4° C for one month. It can also be aliquotted and stored frozen at -20° C for a longer time.Avoid repeated freezing and thawing.                                |

## Protein Information

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name              | AMACR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Function          | Catalyzes the interconversion of (R)- and (S)-stereoisomers of alpha-methyl-branched-chain fatty acyl-CoA esters (PubMed: <a href="#">10655068</a> , PubMed: <a href="#">11060359</a> , PubMed: <a href="#">7649182</a> ). 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: <a href="#">10655068</a> , PubMed: <a href="#">11060359</a> , PubMed: <a href="#">7649182</a> ). |
| Cellular Location | Peroxisome. Mitochondrion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

## Background

Alpha-methylacyl-CoA racemase (AMACR) is a mitochondrial and peroxisomal enzyme. It 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. Read-through transcription also exists between this gene and the upstream neighboring C1QTNF3 (C1q and tumor necrosis factor related protein 3) gene.

## Images



Western blot analysis of AMACR expression in rat kidney extract (lane 1), rat liver extract (lane 2) and HEPG2 whole cell lysates (lane 3). AMACR at 42KD was detected using rabbit anti- AMACR Antigen Affinity purified polyclonal antibody (Catalog # ABO12668) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .

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