

## **Product datasheet for TP313437M**

### OriGene Technologies, Inc.

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## AMACR (NM\_014324) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human alpha-methylacyl-CoA racemase (AMACR), transcript variant 1,

100 µg

Species: Human
Expression Host: HEK293T

**Expression cDNA Clone** 

or AA Sequence:

>Peptide sequence encoded by RC213437 Blue=ORF Red=Cloning site Green=Tag(s)

MALQGISVMELSGLAPGPFCAMVLADFGARVVRVDRPGSRYDVSRLGRGKRSLVLDLKQPRGAAVLRRL CKRSDVLLEPFRRGVMEKLQLGPEILQRENPRLIYARLSGFGQSGSFCRLAGHDINYLALSGVLSKIGR SGENPYAPLNLLADFAGGGLMCALGIIMALFDRTRTDKGQVIDANMVEGTAYLSSFLWKTQKSSLWEAP RGQNMLDGGAPFYTTYRTADGEFMAVGAIEPQFYELLIKGLGLKSDELPNQMSMDDWPEMKKKFADVFA KKTKAEWCQIFDGTDACVTPVLTFEEVVHHDHNKERGSFITSEEQDVSPRPAPLLLNTPAIPSFKRDPF

IGEHTEEILEEFGFSREEIYQLNSDKIIESNKVKASL SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Recombinant protein using RC213437 also available, TP313437

Tag: C-Myc/DDK
Predicted MW: 42.2 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol Bioactivity: ELISA capture for autoantibodies (PMID: 28191285)

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.



RefSeq ORF:

#### AMACR (NM\_014324) Human Recombinant Protein - TP313437M

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** NP 055139

 Locus ID:
 23600

 UniProt ID:
 Q9UHK6

 RefSeq Size:
 2534

 Cytogenetics:
 5p13.2

Synonyms: AMACRD; CBAS4; P504S; RACE; RM

1155

**Summary:** This gene encodes a racemase. The encoded enzyme interconverts pristanoyl-CoA and C27-

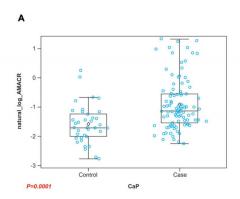
bile acylCoAs between their (R)- and (S)-stereoisomers. The conversion to the (S)-stereoisomers is necessary for degradation of these substrates by peroxisomal beta-oxidation. Encoded proteins from this locus localize to both mitochondria and peroxisomes. Mutations in this gene may be associated with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

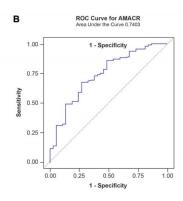
factor related protein 3) gene. [provided by RefSeq, Mar 2011]

**Protein Families:** Druggable Genome

**Protein Pathways:** Metabolic pathways, Primary bile acid biosynthesis

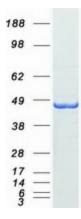
# **Product images:**





Boxplots of the reactivities of the autoantibodies in ELISA against AMACR (OriGene [TP313437]) in the sera of prostate cancer cases and healthy controls. Panel B shows the ROC curve for AMACR. Figure cited from Genes Cancer, PMID: 28191285





Coomassie blue staining of purified AMACR protein (Cat# [TP313437]). The protein was produced from HEK293T cells transfected with AMACR cDNA clone (Cat# [RC213437]) using MegaTran 2.0 (Cat# [TT210002]).