

Product datasheet for SC328474

AMACR (NM 001167596) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: AMACR (NM 001167596) Human Untagged Clone

Tag: Tag Free
Symbol: AMACR

Synonyms: CBAS4; RACE; RM

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC328474 representing NM_001167596.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGCACTGCAGGGCATCTCGGTCGTGGAGCTGTCCGGCCTGGCCCCGGGCCCGTTCTGTGCTATGGTC
CTGGCTGACTTCGGGGCCGTGTGGTACGCGTGGACCCGGCCCGGCTCCCGCTACGACGTGAGCCGCTTG
GGCCGGGGCAAGCGCTCGCTAGTGCTGGACCTGAAGCAGCCGCGGGGAGCCGCCGTGCTGCGGCGTCTG
TGCAAGCGGTCGGATGTGCTGCTGGAGCCCTTCCGCCGCGGGGGAGCCGCCGTGCTGCGGCCCA
GAGATTCTGCAGCGGGAAAATCCAAGGCTTATTTATGCCAGGCTGAGTGGATTTGGCCAGTCAGGAAGC
TTCTGCCGGTTAGCTGGCCACGATATCAACTATTTGGCTTTGTCAGGTGTTCTCTCAAAAATTGGCAGA
AGTGGTGAGAATCCGTATGCCCCGCTGAATCTCCTGGCTGACTTTGCTGGTGGTGGCCTTATGTGTGCA
CTGGGCATTATAAATGGCTCTTTTTGACCGCACACGCACTGGCAAGGGTCAGGTCATTGATGCAAATATG
GTGGAAGGAACAGCATATTTAAGTTCTTTTCTGTGGAAAACTCAGAAATTGAGTCTTGTGGGAAGCACCT
CGAGGACAGAACATGTTGGATGGTGGAGCACCTTTCTATACGACTTACAGGACAGCAGAACTGGTGGAAACTCTTG
CTGAAAATACAACAGGAAGCAGTATCGTGCCAGGCAAGGCAAACCCTCGTCAGTGTAAAGCAATGGCCA

TCGTTGCAGCCCAAGTCATGGGGTTTTGTGTGGCAGTAA

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGAT

ATCCTGGATTACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Rsrll



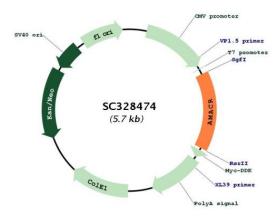
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Plasmid Map:



ACCN: NM_001167596

Insert Size: 867 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: NM 001167596.1

RefSeq Size: 1347 bp RefSeq ORF: 867 bp



AMACR (NM_001167596) Human Untagged Clone - SC328474

 Locus ID:
 23600

 Cytogenetics:
 5p13.2

Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Primary bile acid biosynthesis

MW: 31.7 kDa

Gene 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]

Transcript Variant: This variant (4) differs in the 3' coding region and 3' UTR, compared to variant 1. The resulting isoform (4) has a distinct C-terminus and is shorter than isoform 1.

This isoform is also referred to as AMACR IIA.