

Product datasheet for **SC328627**

AMACR (NM_001167595) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AMACR (NM_001167595) Human Untagged Clone
Tag:	Tag Free
Symbol:	AMACR
Synonyms:	AMACRD; CBAS4; P504S; RACE; RM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC328627 representing NM_001167595 Red=Cloning site Blue=ORF

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCACTGCAGGGCATCTCGGTCTGGAGCTGTCCGGCCTGGCCCCGGGCCGTTCTGTGCTATGGTCC
TGGCTGACTTCGGGGCGCGTGTGGTACGCGTGGACCGGCCGGCTCCCGCTACGACGTGAGCCGTTGGG
CCGGGGCAAGCGCTCGCTAGTGTGGACCTGAAGCAGCCGGGGAGCCCGCTGCTGCGGCGTCTGTGC
AAGCGGTGGATGTGCTGCTGGAGCCCTCCGCCCGGTGTATGGAGAACTCCAGCTGGGCCAGAGA
TTCTGCAGCGGAAAATCCAAGGCTTATTTATGCCAGGCTGAGTGGATTTGGCCAGTCAGGAAGCTTCTG
CCGTTAGCTGGCCACGATATCAACTATTTGGCTTTGTCAGGTGTTCTCTCAAAAATGGCAGAAGTGGT
GAGAATCCGTATGCCCGCTGAATCTCCTGGCTGACTTTGCTGGTGGTGGCTTATGTGTGCACTGGGCA
TTATAATGGCTCTTTTGACCGCACACGCACTGGCAAGGGTCAGGTCAATTGATGCAAATATGGTGGAAAGG
AACAGCATATTTAAGTCTTTTCTGTGGAAAATCAGAAATTGAGTCTGTGGGAAGCACCTCGAGGACAG
AACATGTTGGATGGTGGAGCACCTTTCTATACGACTTACAGGACAGCAGATGGGAATTCATGGCTGTTG
GAGCAATAGAACCCAGTCTACGAGCTGCTGATCAAAGGACTTGACTAAAGTCTGATGAACCTCCCAA
TCAGATGAGCATGGATGATTGGCCAGAAATGAAGAAGAAGTTGCAGATGATTTGCAGAGAAGACGAAG
GCAGAGTGGTGTCAAATCTTTGACGGCACAGATGCCTGTGTGACTCCGGTCTGACTTTTGGAGGTTG
TTCATCATGATCACAAACAGGAACGGGGCTCGTTTATCACCAGTGAGGAGCAGGACGTGAGCCCCCGCCC
TGCACCTCTGCTGTTAAACACCCAGCCATCCCTTCTTTCAAAAGGGATCCTTTTATAGGAGAACAACACT
GAGGAGATACTTGAAGAATTTGGATTACGCCGGAAGAGATTTATCAGCTTAACTCAGATAAAATCATTG
AAAGTAATAAGGCTGGTAGCAAGTCTGGATCTTATACCAACACACAGCAACATCCAGAAATAAAGCGG
ACCG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA



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Restriction Sites:	Please inquire
ACCN:	NM_001167595
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info</p>
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:	<ol style="list-style-type: none"> 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_001167595.1 , NP_001161067.1
RefSeq Size:	2603 bp
RefSeq ORF:	1185 bp
Locus ID:	23600
UniProt ID:	Q9UHK6
Cytogenetics:	5p13.2
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Primary bile acid biosynthesis

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 (3) lacks an alternate segment in the 3' end of the CDS, which results in a frameshift, compared to variant 1. The resulting protein (isoform 3) is longer and has a distinct C-terminus, compared to isoform 1. This isoform is also referred to as AMACRIADEL.