

Product datasheet for **SC115040**

AMACR (NM_014324) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AMACR (NM_014324) Human Untagged Clone
Tag:	Tag Free
Symbol:	AMACR
Synonyms:	AMACRD; CBAS4; P504S; RACE; RM
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC115040 sequence for NM_014324 edited (data generated by NextGen Sequencing)

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ATGGCACTGCAGGCATCTCGGTGATGGAGCTGTCCGGCCTGGCCCCGGGCCGTTCTGT  
GCTATGGTCTGCTGACTTCGGGGCGCGTGTGGTACGCGTGGACCGCCCGGCTCCCGC  
TACGACGTGAGCCGCTTGGGCCGGGCAAGCGCTCGCTAGTGTGACCTGAAGCAGCCG  
CGGGGAGCCGCGTGTGCGGCGTCTGTGCAAGCGGTGGATGTGCTGGAGCCCTTC  
CGCCGCGGTGTCATGGAGAACTCCAGCTGGGCCAGAGATTCTGCAGCGGAAAATCCA  
AGGCTTATTTATGCCAGGCTGAGTGGATTTGGCCAGTCAGGAAGCTTCTGCCGTTAGCT  
GGCCACGATCAACTATTTGGCTTTGTCAGGTGTTCTCTCAAAAATTGGCAGAAGTGGT  
GAGAATCCGTATGCCCCGCTGAATCTCCTGGCTGACTTTGCTGGTGGTGGCCTTATGTG  
GCACTGGGCATTATAATGGCTCTTTTTGACCGCACACGCACTGACAAGGGTCAGGTCATT  
GATGCAAATATGGTGGAAAGGAACAGCATATTTAAGTTCTTTCTGTGAAAACCTCAGAAA  
TCGAGTCTGTGGGAAGCACCTCGAGGACAGAACATGTTGGATGGTGGAGCACCTTCTAT  
ACGACTTACAGGACAGCAGATGGGGAATTCATGGCTGTTGGAGCAATAGAACCCAGTTC  
TACGAGCTGTGATCAAAGGACTTGACTAAAGTCTGATGAACCTCCCAATCAGATGAGC  
ATGGATGATTGGCCAGAAATGAAGAAGAAGTTGTCAGATGATTTGCAAAGAAGACGAAG  
GCAGAGTGGTGTCAAATCTTTGACGGCACAGATGCCTGTGTGACTCCGGTTCTGACTTTT  
GAGGAGGTTGTTTCATCATGATCACAACAAGGAACGGGGCTCGTTTATCACCAGTGAGGAG  
CAGGACGTGAGCCCCCGCCCTGCACCTCTGCTGTTAAACACCCAGCCATCCCTTCTTTC  
AAAAGGGATCCTTTTCATAGGAGAACACACTGAGGAGATACTTGAAGAATTTGGATTGAGC  
CGCGAAGAGATTTATCAGCTTAACCTCAGATAAAAATCATTGAAAGTAATAAGGTAAAAGCT  
AGTCTCTAA
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Clone variation with respect to NM_014324.5
25 g=>a;524 g=>a;602 t=>c;829 g=>a



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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_014324 unedited
 TAGATTTTGTAAACACGATTTACTATAGGGCGGCCGCAATTCGCACGAGGCTGGGGCTAA
 GGGCTGCTCAGTTTCCTTCAGCGGGGCACTGGGAAGCGCCATGGCACTGCAGGGCATCTC
 GGTTCATGGAGCTGTCCGGCTGGCCCCGGGCCGTTCTGTGCTATGGTCTGGCTGACTT
 CCGGGCGCGTGTGGTACGCGTGGACCGGCCCGCTCCCCTACGACGTGAGCCGTTGGG
 CCGGGGCAAGCGCTCGCTAGTGTGGACCTGAAGCAGCCGGGGAGCCCGCTGCTGCC
 CGCTCTGTGCAAGCGGTGGATGTGCTGCTGGAGCCCTTCGCGCGGTGTCATGGAGAA
 ACTCCAGCTGGGCCAGAGATTCTGCAGCGGAAAATCCAAGGCTATTTATGCCAGGCT
 GAGTGGATTTGGCCAGTCAGGAAGCTTCTGCCGTTAGCTGGCCACGATATCAACTATTT
 GGCTTTGTGAGGTGTTCTCTCAAAAATTGGCAGAAGTGGTGAAGATCCGTATGCCCGCT
 GAATCTCCTGGCTGACTTTGCTGGTGGTGGCCTTATGTGTGCACTGGGCATTATAATGGC
 TCTTTTTGACCGCACACGCACTGACAAGGGTCAAGTCAATGATGCAAATATGGTGAAGG
 AACAGCATATTTAAGTCTTTTTCTGTGAAAACCTAGAAATCGAGTCTGTGGGAAGCACC
 TCGAGGACAGAACATGTNGNATGGTGGAGCACCTTTCTATACGACTTTACAGACAGCAGA
 TGGGGAATTCATGGCTGNTGGAGCAATAGAACCAGNTCTACGAGCTGCTGATCAAAGGA
 CTTGNACTAAAGTCTGATGAACTCCCCATCAAAGAGCATGGATGATTNGCCAAAAATGAG
 AAGAGTTTGCAGAGTATTTGCAAAAAGACGAAGCAGAGTGTGCAATCTT

3' Read Nucleotide Sequence:

>OriGene 3' genomic read for NM_014324 unedited
 GCCGCATTCTAGTATCGAGTTTTTTTTTTTTTTTTTTAGGGAAAACATCTTTTTATTAT
 TATTATTTTTATTATTTATTTAAAGACAGTTCTTGTCTGTTGCTGGGCTAGAGTGC
 AGTGGTGAATCCTAATTCAGTGTGGCCTCAAATTCCTGGGCTCAAGTATCCTCCTGCC
 CCACCTTGAGTAGATAGGACTACAGGCACACACCACCATACCTGGATAATTTTTTTATT
 TTTATTTTCGTAGAAACGGAGTCCAGCCAAAGTTCCTCAGGCTGGTCTCGAACTCTGGCC
 TCAAGTATCCTCCATGCCTGGGCTGGAAAACATAACCTTATGGGAAAAGTTCCTAAAAAT
 GGTGGAAGAAACAAGACTGAAGGCTAGAATATGAAAGCTTAAATCTGATTCTGCCCTTC
 CTAGTTGCATATTCCTGAGCAAAATTTTCAACTGGTATTTCTAAAACCTGTGCCAAGGCA
 CCCAGGGCATTAGAGTGACCTCACAAAGATATCTCAGAATATTTAAAAATTTGAACACAC
 AAACACAATGAACTCAACATCTGTCAGACATCACGTGAACTACTAGTGGGTAGTTCAT
 TCTTTCAACATAAGATTGCACTATAATCCTTCTGATAAATTCATATTTTCGTGAGACTGG
 GTTTTCCAGGCCATCTGATAAAAAATCAGTACTATATGGACACCAACATGGAGCATAAAA
 TGAGGGCAGCATTGTCCAATCTCATTTCAGTGAAGGAAAGTTGCACAGTGTCCAATAGGTG
 CATACTCTTCTAGTAAGTAGTTGGGGATTACCATGAAATAAATTGAAAAATTATTTTT
 TATTAAGGGCATAATATTCTTCAGCAGCCTAAAAGTGGGAAGGACATATTTAATTCCG
 TGGGGACTCATTATTTATAATAGAATGGTAAATATTTCTTTGGCCTACCACCCTGAAAAT
 ACCGTGGCCCAAGGGAAGTACCACAAAACCTTGATCTCTGTTTTT

Restriction Sites:

NotI-NotI

ACCN:

NM_014324

Insert Size:

3410 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).

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_014324.4](#), [NP_055139.4](#)

RefSeq Size: 2534 bp

RefSeq ORF: 1149 bp

Locus ID: 23600

UniProt ID: [Q9UHK6](#)

Cytogenetics: 5p13.2

Domains: CAIB-BAIF

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 (1) represents the longest transcript and encodes isoform 1, also referred to as AMACR IA.