

## Product datasheet for **SC328464**

### AMACR (NM\_001167597) Human Untagged Clone

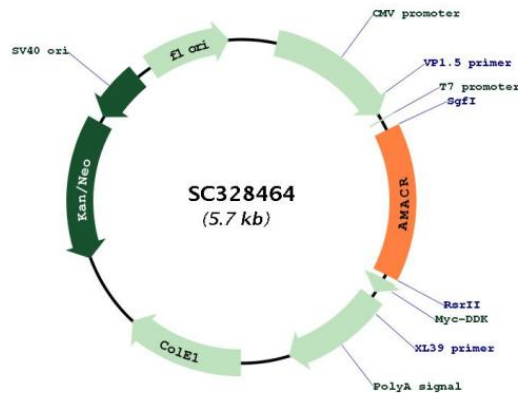
#### Product data:

Product Type:	Expression Plasmids
Product Name:	AMACR (NM_001167597) 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:	>SC328464 representing NM_001167597. Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTTGTGAACCGTCAGAATTTGTAAACGACTACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCACTGCAGGGCATCTCGGTCTGGAGCTGTCCGGCCTGGCCCCGGGCCCGTTCTGTGCTATGGTC
CTGGCTGACTTCGGGGCGCGTGTGGTACGCGTGGACCGGCCCGGCTCCCGCTACGACGTGAGCCGTTG
GGCCGGGGCAAGCGCTCGCTAGTGTGGACCTGAAGCAGCCGGGGAGCCCGCTGCTGCGGCGTCTG
TGCAAGCGGTGGATGTGCTGCTGGAGCCCTCCGCCCGGTGTCATGGAGAACTCCAGCTGGGCCCA
GAGATTCTGCAGCGGGAAAATCCAAGGCTATTTATGCCAGGCTGAGTGGATTTGGCCAGTCAGGAAGC
TTCTGCCGGTTAGCTGGCCACGATATCAACTATTTGGCTTTGTGAGTGGAAAGCAACAGCATATTTAAG
TTCTTTTCTGTGAAAACCTCAGAAATTGAGTCTGTGGAAAGCACCTCGAGGACAGAACATGTTGGATGG
TGGAGCACCTTTCTATACGACTTACAGGACAGCAGATGGGGAATTCATGGCTGTTGGAGCAATAGAACC
CCAGTTCTACGAGCTGCTGATCAAAGGTCTGGGAGAACTGATCTTGTGAAAATACAACAGGAAGCAGT
ATCGTGCCAGGCAAGGCAAAACCTCGTCAGTGTGAAGCAATGGCCATCGTTGCAGCCCAAGTCATGGGG
TTTTGTGTGGCAGTAACCGTTGGAGCGGCAATGGCCATTTTGTGTTGGATGTTTCAAGCCAATGATG
ATTAATAATTTATGTTACACTCAGGCTGCTGGGGGATGCTTCAGTTTCCTTCACAGAAAATAAATAGT
GGGAATCCGGACCATAA
AGCGGACCGACCGGTACCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGAT
ATCCTGGATTACAAGGATGACGACGATAAGGTTTAA
```

Restriction Sites: SgfI-RsrII



**Plasmid Map:**


**ACCN:** NM\_001167597

**Insert Size:** 846 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\\_001167597.1](#)

**RefSeq Size:** 1186 bp

**RefSeq ORF:** 846 bp

<b>Locus ID:</b>	23600
<b>Cytogenetics:</b>	5p13.2
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Metabolic pathways, Primary bile acid biosynthesis
<b>MW:</b>	30.8 kDa
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (5) lacks an exon in the coding region and differs in the 3' coding region and 3' UTR, compared to variant 1. The resulting isoform (5) has a distinct C-terminus and is shorter than isoform 1. This isoform is also referred to as AMACR IIB.</p>