

Product datasheet for **RG229836**

AMACR (NM_001167596) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: AMACR (NM_001167596) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: AMACR
Synonyms: CBAS4; RACE; RM
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG229836 representing NM_001167596
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCACTGCAGGGCATCTCGGTCGTGGAGCTGTCCGGCCTGGCCCCGGGCCCGTTCTGTGCTATGGTCC
 TGGCTGACTTCGGGGCGCGTGTGGTACGCGTGGACCGCCCGGCTCCCGCTACGACGTGAGCCGCTTGGG
 CCGGGCAAGCGCTCGTAGTGTGGACCTGAAGCAGCCGGGGAGCCCGCTGCTGCGGCGTCTGTGC
 AAGCGGTCGGATGTGCTGCTGGAGCCCTCCGCCCGGTGTATGGAGAACTCCAGCTGGGCCAGAGA
 TTCTGCAGCGGAAAATCCAAGGCTTATTTATGCCAGGCTGAGTGGATTTGGCCAGTCAGGAAGCTTCTG
 CCGTTAGCTGGCCACGATATCAACTATTTGGCTTTGTCAGGTGTTCTCTCAAAAATTGGCAGAAGTGGT
 GAGAATCCGATGCCCGCTGAATCTCCTGGCTGACTTTGCTGGTGGTGGCCTTATGTGTCACTGGCA
 TTATAATGGCTCTTTTGACCGCACACGCACTGGCAAGGGTCAGGTCATTGATGCAAAATATGGTGAAGG
 AACAGCATATTTAAGTCTTTTCTGTGGAAAACAGAAATTGAGTCTGTGGGAAGCACCTCGAGGACAG
 AACATGTTGGATGGTGGAGCACCTTTCTATACGACTTACAGGACAGCAGATGGGAATTCATGGCTGTTG
 GAGCAATAGAACCCAGTCTACGAGCTGCTGATCAAAGTCTGGGAGAACTGATCTTGTGAAAATACA
 ACAGGAAGCAGTATCGTGCCAGGCAAGGCAACCTCGTCAGTGTGAAGCAATGGCCATCGTTGCAGCCC
 AAGTCATGGGGTTTTGTGTGGCAG

AG**CGGACCG**ACGCGTACGCGCCGCTCGAG - GFP Tag - GTTTAA



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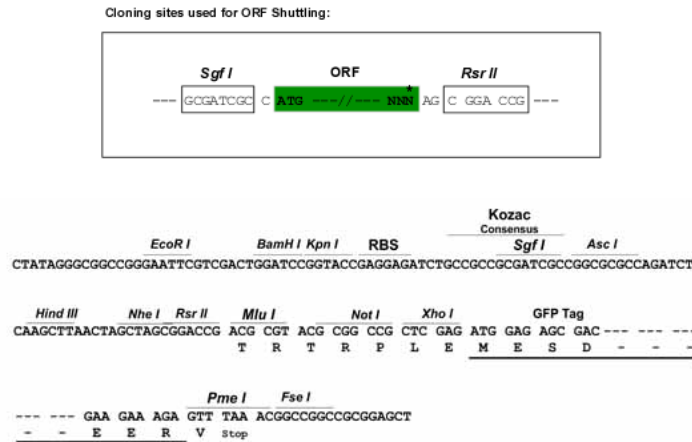
Protein Sequence: >RG229836 representing NM_001167596
Red=Cloning site Green=Tags(s)

MALQGISVVELSGLAPGPFAMVLADFGARVVRVDRPGSRYDVSRLGRGKRSVLDLKQPRGAAVLRRLC
 KRSDVLLLEPFRRGVMEKLLQGP EILQRENPRLIYARLSGFGQSGSFCRLAGHDINYLLALSGVLSKIGRSG
 ENPYAPLNLADFAAGGLMCALGIIMALFDRTRTGKGQVIDANMVEGTAYLSSFLWKTQKLSLWEAPRGQ
 NMLDGGAPFYTTYRTADGEFMAVGAIEPQFYELLIKLGL EILLLKIQQEAVSCQARQTLVSVKQWPSLQP
 KSWG FVWQ

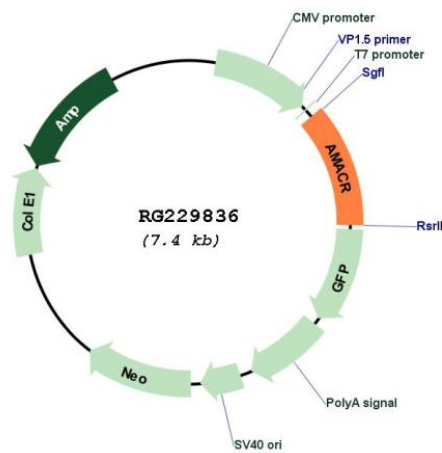
SGPTRRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:



Plasmid Map:



ACCN: NM_001167596

ORF Size: 864 bp

OTI Disclaimer:	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
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
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_001167596.1 , NP_001161068.1
RefSeq Size:	1347 bp
RefSeq ORF:	866 bp
Locus ID:	23600
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]