

Product datasheet for **SC301935**

CARS1 (NM_001014437) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CARS1 (NM_001014437) Human Untagged Clone
Tag:	Tag Free
Symbol:	CARS1
Synonyms:	CARS; CYSRS; MCDDDBH; MDBH; MGC:11246
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



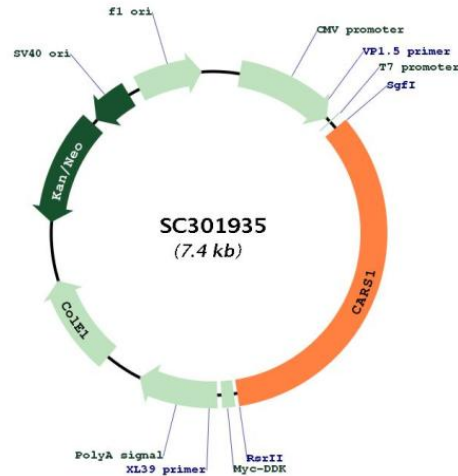
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Fully Sequenced ORF: >SC301935 representing NM_001014437.
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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Restriction Sites: Sgfl-RsrII

Plasmid Map:


ACCN: NM_001014437

Insert Size: 2496 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_001014437.2](#)

RefSeq Size: 2799 bp

RefSeq ORF: 2496 bp

Locus ID: 833

UniProt ID: [P49589](#)

Cytogenetics: 11p15.4

Protein Families: Druggable Genome

Protein Pathways: Aminoacyl-tRNA biosynthesis

MW: 94.6 kDa

Gene Summary: This gene encodes a class 1 aminoacyl-tRNA synthetase, cysteinyl-tRNA synthetase. Each of the twenty aminoacyl-tRNA synthetases catalyzes the aminoacylation of a specific tRNA or tRNA isoaccepting family with the cognate amino acid. This gene is one of several located near the imprinted gene domain on chromosome 11p15.5, an important tumor-suppressor gene region. Alterations in this region have been associated with Beckwith-Wiedemann syndrome, Wilms tumor, rhabdomyosarcoma, adrenocortical carcinoma, and lung, ovarian and breast cancers. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Aug 2010]

Transcript Variant: This variant (3) includes an additional in-frame exon in the 5' coding region, and uses an alternate splice site that causes a frameshift in the 3' coding region, compared to variant 1. The encoded isoform (c) has an additional segment in the N-terminal region and a distinct and longer C-terminus, compared to isoform a.