

Product datasheet for **SC124342**

CARS1 (NM_139273) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CARS1 (NM_139273) Human Untagged Clone
Tag:	Tag Free
Symbol:	CARS1
Synonyms:	CARS; CYSRS; MCDDDBH; MDBH; MGC:11246
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC124342 sequence for NM_139273 edited (data generated by NextGen Sequencing)

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ATGGCAGATTCTCCGGGCAGCAGGGCAAAGGCCGGCGTGTGCAGCCCCAGTGGTCCCCT
CCTGCTGGGACCCAGCCATGCAGACTCCACCTTACAACAGCCTCACCAGGAACAAGGAA
GTGTTCAACCTCAAGATGGGAAAAAGGTGACGTGGTATTGCTGTGGGCCAACCGTCTAT
GACGCATCTCACATGGGGCAGCCAGGTCTACATCTCTTTTGATATCTTGAGAAGAGTG
TTGAAGGATTACTCAAATTTGATGTCTTTTATTGCATGAACATTACGGATATTGATGAC
AAGATCATCAAGAGGGCCCGGCAGAACCACCTGTTCGAGCAGTATCGGGAGAAGAGCCT
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AATGAGACCACGGATCCCGATAAAAAAGCAGATGCTCGAACGGATTGAGCAGCAGTGCAG
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GCCTTATGGAAGGCCCTAAGGCCGGAGAACCCTCCTGGCCGTGCCCTTGGGGAAAGGGT
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GACATTCACGGAGGTGGGTTTCGACCTCCGGTCCCCCACCATGACAATGAGCTGGCACAG
TCGGAGGCCTACTTTGAAAACGACTGCTGGGTCAGGTACTTCTGCACACAGGCCACCTG
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ATCCTGCCCGAGCTTGGGGTGGCGTTTGAAGACCAGAAAGGACTGCCACAGTGGTGAAA
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AAGAGGAAGAAGAAGAGGAGGCCGGCCCGGAGGAAACAGGAACAAGAAGCAGCAAAGCTG
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TTTGATGAAAATGTAAGCATGGTCTGCCACACATGACATGGAGGGCAAAGAGCTCAGCA
AAGGGCAAGCCAAGAAGCTGA

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Clone variation with respect to NM_139273.3

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_139273 unedited
 AGGAATTTGTAATACGACTTCACTATAGGGCGGCCGGAATTCGCACGAGGTAGCCGCAG
 CTGCGGGTCCGGGATTCCCAGCCATGGCAGATTCTCCGGGCAGCAGGGCAAAGGCCGGC
 GTGTGCAGCCCCAGTGGTCCCCTCTGCTGGGACCCAGCCATGCAGACTCCACCTTTACA
 ACAGCCTCACCAGGAACAAGGAAGTGTTCATACCTCAAGATGGGAAAAAGGTGACGTGGT
 ATTTGTGTGGGCCAACCGTCTATGACGCATCTCACATGGGGCAGCCAGGTCCTACATCT
 CTTTTGATATCTTGAGAAGAGTGTGAAGGATTACTTCAAATTTGATGTCTTTTATTGCA
 TGAACATTACGGATATTGATGACAAGATCATCAAGAGGGCCCGCAGAACCACCTGTTCCG
 AGCAGTATCGGGAGAAGAGGCCCTGAAGCGGCACAGCTCTTGAGAGATGTTCAGGCCGCC
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 GACTCACGGGAGAGGAAGTCAACAGCTGTGTGGAGGTGTGCTGGAAGAAGCCAAGGATT
 TGCTCTGACTGGCTGGATTCTACACTGGCTGTGATGCTACTGACAATCCATCTTCT
 CCAAGCTGCCAAGTTCTGGGAGGGGACTTCCACAGAGACATGGAAGCTCTGAAATGTT
 CTCCTCCAGATGTCTTAACCCGGTTAGTGAGTATGTGCCAGAAATGTGAACCTGTCCA
 GAAGAATGTGACACGGTTACGCTATGTCTCAATGGTCTGTCTACTTGAACAGCGAAGTT
 GCTTCTACGAGAGCACTATGAAGNCTGTGCTGAGGCGTTGNAATCAAAGCCTCAGAG
 GGGAGTGACTGACATTT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_139273 unedited
 TTTTTTCGTTTACTAAGAACCAGCCGCATACNANGATCGNATTTTTTTTTTTTTTTTTT
 TTCACTGTTNGAAAAAATTATTATCAATGTCTCAAAGCCAACGACGACACGAACCTACA
 TGAACACAACCTTAATTTAGGACCCAAGGGTACTGTAACATGATAGGAGCGCTGGGA
 CATTGTCACTGAGGCAGACAGCAGCCACTAGTCCACAATGGTTTAAAAAGTCAGTCTGT
 GCCCCTCACTGGAAGCTTCATTCTGGGCCATCTGCAGATATTCCTTGTAGAGCTTCTC
 CTGAGCCTCGAAGAGCTTCTTACGCTTCTTGGCTTGCCCTTTGCTGAGCTCTTGGCCCTC
 CATGTCATGTGTGGGCAGACCATGCTTACATTTTCATCAAACCTGGAGTATTTGTCGGTT
 TCTGACAAGAACATCTCACTGGGGGAATCTTCATCTTGGCCAGCTTTGCTGCTTCTGT
 TCCTGTTTCTCCGGGCCGCTCCTCTTCTTCTTCTTCTTCTTCTTCAACCCGCTCTC
 TTTTCTTCTCTCTTTTAAATAAGGTGTTTCTGTCTACCAGTTTACCAGTGTGGGCATCG
 CCTTCGTGGTCTTCAAACCGCACCCCAAGCTCGGGCAGGATGTTGTCCCGCAGGGCATCG
 CTGAGCTGCAGAATCTCAGGGACTTTTTGCTCTCGGGCAATCTCCGCACTCCTTCTCGG
 AATTCTGATAACACCNTGAGGTAGGGCATGACTGTGGCCTCGAGACTGAGGCTGTTTCCA
 GGCCCTCCGACCGGGAATCCCAGGGAGCTGTCCTTCTACGGCCCCAAAGTCTTCACAT
 ATGGGTGAAGTACAGGGCGATGT

Restriction Sites:

NotI-NotI

ACCN:

NM_139273

Insert Size:

2550 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:	<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_139273.2 , NP_644802.1
RefSeq Size:	2536 bp
RefSeq ORF:	2181 bp
Locus ID:	833
UniProt ID:	P49589
Cytogenetics:	11p15.4
Domains:	tRNA-synt_1e
Protein Families:	Druggable Genome
Protein Pathways:	Aminoacyl-tRNA biosynthesis
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (1) consists of 22 exons and encodes the shortest isoform (a).</p>