

Product datasheet for **SC319245**

Methionyl tRNA synthetase (MARS) (NM_004990) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Methionyl tRNA synthetase (MARS) (NM_004990) Human Untagged Clone
Tag:	Tag Free
Symbol:	Methionyl tRNA synthetase
Synonyms:	CMT2U; ILFS2; ILLD; MARS; METRS; MRS; MTRNS; SPG70
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene sequence for NM_004990.2
 ACGGCGAAATGAGACTGTTCTGAGTATGGCGTCCCAGGTTGCTTGCCGGTGTGGCCG
 CCGCCGGGAGAGCCCGGGCAGAGCAGAGGTGCTCATCAGCACTGAGGCCGGAAGATT
 GTGTGGTCCCCTTCTGACCCGGCTAAGTCCCTGTCTTGACAGTGGATAGCGGCAACT
 ACCTCTTCTCCACTAGTGAATCTGCCGATATTTTTTTTGTATCTGGCTGGGAGCAAG
 ATGACCTACTAACCAGTGGCTGGAATGGGAAGCGACAGAGCTGCAGCCAGCTTTGTCTG
 CTGCCCTGTACTATTTAGTGGTCCAAGGCAAGAAGGGGGAAGATGTTCTTGGTTACAGTGC
 GGAGAGCCCTGACTCACATTGACCACAGCTTGAGTCGTCAGAAGTGCCTTTCCTGGCTG
 GGGAGACAGAATCTCTAGCCGACATTGTTTTGTGGGGAGCCCTATACCCATTACTGCAAG
 ATCCCGCTACCTCCCTGAGGAGCTGAGTGCCCTGCACAGCTGGTTCCAGACACTGAGTA
 CCCAGGAACCATGTCAGCGAGCTGCAGAGACTGTACTGAAACAGCAAGGTGCTCTGGCTC
 TCCGGCTTACCTCCAAAAGCAGCCCCAGCCAGCCCCGCTGAGGGAAGGGCTGCACCA
 ATGAGCCTGAGGAGGAGGAGCTGGCTACCCTATCTGAGGAGGAGATTGCTATGGCTGTTA
 CTGCTTGGGAGAAGGGCTAGAAAGTTTCCCCCGCTGCGGCCAGCAGAATCCAGTGT
 TGCTGTGGCTGGAGAAAGGAATGTGCTCATCACCAGTGCCTCCCTTACGTCAACAATG
 TCCCCACCTTGGGAACATCATTGGTTGTGTGCTCAGTGCCGATGTCTTGGCAGTACT
 CTCGCCTCCGCCAGTGGAAACACCCTCTATCTGTGTGGGACAGATGAGTATGGTACAGCAA
 CAGAGACCAAGGCTCTGGAGGAGGGACTAACCCCCAGGAGATCTGCGACAAGTACCACA
 TCATCCATGCTGACATCTACCGCTGGTTTAACATTTTCTTTGATATTTTTGGTCGACCA
 CCACTCCACAGCAGACCAAAATCACCCAGGACATTTTCCAGCAGTTGCTGAAACGAGGTT
 TTGTGCTGCAAGATACTGTGGAGCAACTGCGATGTGAGCACTGTGCTCGCTTCTGGCTG
 ACCGCTTCGTGGAGGCGTGTGTCCCTTCTGTGGCTATGAGGAGGCTCGGGGTGACCAGT
 GTGCAAGTGTGGCAAGCTCATCAATGCTGTGAGCTTAAAGAGCCTCAGTGTAAAGTCT
 GCCGATCATGCCCTGTGGTGCAGTCGAGCCAGCACCTGTTTCTGGACCTGCCTAAGCTGG
 AGAAGCGACTGGAGGAGTGGTTGGGAGGACATTGCCTGGCAGTACTGGACACCCAATG
 CCCAGTTTATCACCCGTTCTTGGCTTCGGGATGGCCTCAAGCCACGCTGCATAACCCGAG
 ACCTCAAATGGGGAACCCCTGTACCCTTGAAGGTTTTGAAGACAAGGTATTCTATGTCT
 GGTGTTGATGCCACTATTGGCTATCTGTCCATCACAGCCAACTACACAGACCAGTGGGAGA
 GATGGTGAAGAACCAGAGCAAGTGGACCTGTATCAGTTCATGGCCAAAGACAATGTTT
 CTTTCCATAGCTTAGTCTTTCCTTGTCTCAGCCCTAGGAGCTGAGGATAACTATACCTTGG
 TCAGCCACCTCATTGCTACAGAGTACCTGAACTATGAGGATGGGAAATTTCTAAGAGCC
 GCGGTGTGGGAGTGTGGGGACATGGCCAGGACACGGGGATCCCTGCTGACATCTGGC
 GCTTCTATCTGCTGTACATTCCGGCTGAGGGCCAGGACAGTGTCTTCTCCTGGACGGACC
 TGCTGCTGAAGAATAATTCTGAGCTGCTTAACAACCTGGGCAACTTCATCAACAGAGCTG
 GGATGTTTGTGTCTAAGTTCTTTGGGGCTATGTGCTGAGATGGTGTCTACCCCTGATG
 ATCAGCGCTGCTGGCCATGTCACCCTGGAGCTCCAGCACTATCACCAGCTACTTGAGA
 AGGTTCCGATCCGGGATGCCTTGGCAGTATCCTCACCATATCTCGACATGGCAACCAAT
 ATATTCAGGTGAATGAGCCCTGGAAGCGGATTAAGGCAAGTGGCTGACAGGCAACGGG
 CAGGAACAGTACTGGCTTGGCAGTGAATATAGCTGCCTTGTCTCTGTCTGCTTCCAGC
 CTTACATGCCACGGTTAGTGCCACAATCCAGGCCAGCTGCAGCTCCCACCTCCAGCCT
 GCAGTATCCTGCTGACAACTTCTGTGTACCTTACCAGCAGGACACCAGATTGGCACAG
 TCAGTCCCTTGTCCAAAATTGGAAAATGACCAGATTGAAAGTTTAAAGCAGCGCTTTG
 GAGGGGGCCAGGCAAAAACGTCGCCGAGCCAGCAGTTGTAGAGACTGTTACAACAGCCA
 AGCCACAGCAGATACAAGCGCTGATGGATGAAGTGACAAAACAAGGAAACATTGTCCGAG
 AACTGAAAGCACAAAAGGACAGACAAGAACGAGGTTGCTGCGGAGGTGGCGAAACTCTTGG
 ATCTAAAGAAACAGTTGGCTGTAGCTGAGGGGAAACCCCTGAAGCCCTAAAGGCAAGA
 AGAAAAAGTAAAAGACCTTGGCTCATAGAAAGTCACTTTAATAGATAGGGACAGTAATAA
 ATAAATGTACAATCTCTATAAAAAAAAAAAAAAAAAAAAAA

Restriction Sites: Please inquire

ACCN: NM_004990

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:	<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_004990.2 , NP_004981.2
RefSeq Size:	2795 bp
RefSeq ORF:	2703 bp
Locus ID:	4141
UniProt ID:	P56192
Cytogenetics:	12q13.3
Domains:	WHEP-TRS, tRNA-synt_1, GST_C
Protein Families:	Druggable Genome
Protein Pathways:	Aminoacyl-tRNA biosynthesis, Selenoamino acid metabolism
Gene Summary:	This gene encodes a member of the class I family of aminoacyl-tRNA synthetases. These enzymes play a critical role in protein biosynthesis by charging tRNAs with their cognate amino acids. The encoded protein is a component of the multi-tRNA synthetase complex and catalyzes the ligation of methionine to tRNA molecules. [provided by RefSeq, Jan 2011]