

Product datasheet for **SC308691**

Tryptophanyl tRNA synthetase (WARS) (NM_213646) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tryptophanyl tRNA synthetase (WARS) (NM_213646) Human Untagged Clone
Tag:	Tag Free
Symbol:	Tryptophanyl tRNA synthetase
Synonyms:	GAMMA-2; HMN9; IFI53; IFP53; WARS
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	<p>>NCBI ORF sequence for NM_213646, the custom clone sequence may differ by one or more nucleotides</p> <pre> ATGTTGGTGTCATTAAAAATGAGCTACAAAGCTGCCGCGGGGAGGATTACAAGGCTGAC TGTCCTCCAGGGAACCCAGCACCTACCAGTAATCATGGCCAGATGCCACAGAAGCTGAA GAGGATTTTGTGGACCCATGGACAGTACAGACAAGCAGTGCAAAAGGCATAGACTACGAT AAGCTCATTGTTGCGTTTGGAAGTAGTAAAATTGACAAAGAGCTAATAAACCGAATAGAG AGAGCCACCGGCCAAAGACCACCACTTCCTGCGCAGAGGCATCTTCTTCTCACACAGA GATATGAATCAGTTTCTGATGCCTATGAAAATAAGAAGCCATTTTATCTGTACACGGGC CGGGGCCCTCTTCTGAAGCAATGCATGTAGGTCACCTCATTCCATTTATTTTCACAAAG TGGCTCCAGGATGATTTAACGTGCCCTTGGTCATCCAGATGACGGATGACGAGAAGTAT CTGTGGAAGGACCTGACCTGGACCAGGCCTATAGCTATGCTGTGGAGAATGCCAAGGAC ATCATCGCTGTGGCTTTGACATCAACAAGACTTTCATATTCTCTGACCTGGACTACATG GGGATGAGCTCAGGTTTCTACAAAAATGTGGTGAAGATTCAAAAGCATGTTACCTTCAAC CAAGTGAAAGGCATTTTCGGCTTCACTGACAGCGACTGCATTGGGAAGATCAGTTTTCT GCCATCCAGGCTGCTCCCTCCTTCAGCAACTCATTCCACAGATCTTCCGAGACAGGACG GATATCCAGTGCCTTATCCCATGTGCCATTGACCAGGATCCTTACTTTAGAATGACAAGG GACGTGCGCCCCAGGATCGGCTATCCTAAACCAGCCCTGCTGCACTCCACCTTCTTCCA GCCCTGCAGGGCGCCAGACCAAAATGAGTGCCAGCGACCCCAACTCCTCCATCTTCCTC ACCGACACGGCCAAGCAGATCAAAACCAAGGTCAATAAGCATGCGTTTTCTGGAGGGAGA GACACCATCGAGGAGCACAGGCAGTTTGGGGGCAACTGTGATGTGGACGTGCTTTTCATG TACCTGACCTTCTTCTCGAGGACGACGACAAGCTCGAGCAGATCAGGAAGGATTACACC AGCGGAGCCATGCTCACCGGTGAGCTCAAGAAGGCACTCATAGAGTTCTGCAGCCCTTG ATCGCAGAGCACCAGGCCCGCGCAAGGAGGTACGGATGAGATAGTGAAAGAGTTCATG ACTCCCCGGAAGCTGTCCTTCGACTTTCAGTAG </pre>
Restriction Sites:	Please inquire
ACCN:	NM_213646



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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:	<u>NM_213646.1, NP_998811.1</u>
RefSeq Size:	2712 bp
RefSeq ORF:	1293 bp
Locus ID:	7453
UniProt ID:	<u>P23381</u>
Cytogenetics:	14q32.2
Protein Families:	Druggable Genome
Protein Pathways:	Aminoacyl-tRNA biosynthesis, Tryptophan metabolism
Gene Summary:	<p>Aminoacyl-tRNA synthetases catalyze the aminoacylation of tRNA by their cognate amino acid. Because of their central role in linking amino acids with nucleotide triplets contained in tRNAs, aminoacyl-tRNA synthetases are thought to be among the first proteins that appeared in evolution. Two forms of tryptophanyl-tRNA synthetase exist, a cytoplasmic form, named WARS, and a mitochondrial form, named WARS2. Tryptophanyl-tRNA synthetase (WARS) catalyzes the aminoacylation of tRNA(trp) with tryptophan and is induced by interferon. Tryptophanyl-tRNA synthetase belongs to the class I tRNA synthetase family. Four transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (4) differs in the 5' UTR and coding region compared to variant 1. The resulting isoform (b) uses a downstream start codon but has the same C-terminus compared to isoform a. Variants 3 and 4 both encode isoform b.</p>