OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC117859

Tyrosyl tRNA synthetase (YARS) (NM_003680) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tyrosyl tRNA synthetase (YARS) (NM_003680) Human Untagged Clone
Tag:	Tag Free
Symbol:	Tyrosyl tRNA synthetase
Synonyms:	CMTDIC; TYRRS; YARS; YRS; YTS
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

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Fully Sequenced ORF:

>OriGene ORF within SC117859 sequence for NM_003680 edited (data generated by NextGen Sequencing)

ATGGGGGACGCTCCCAGCCCTGAAGAGAAACTGCACCTTATCACCCGGAACCTGCAGGAG
GTTCTGGGGGAAGAGAAGCTGAAGGAGATACTGAAGGAGCGGGAACTTAAAATTTACTGG
GGAACGGCAACCACGGGCAAACCACATGTGGCTTACTTTGTGCCCATGTCAAAGATTGCA
GACTTCTTAAAGGCAGGGTGTGAGGTAACAATTCTGTTTGCGGACCTCCACGCATACCTG
GATAACATGAAAGCCCCATGGGAACTTCTAGAACTCCGAGTCAGTTACTATGAGAATGTG
ATCAAAGCAATGCTGGAGAGCATTGGTGTGCCCTTGGAGAAGCTCAAGTTCATCAAAGGC
ACTGATTACCAGCTCAGCAAAGAGTACACACTAGATGTGTACAGACTCTCCTCCGTGGTC
ACACAGCACGATTCCAAGAAGGCTGGAGCTGAGGTGGTAAAGCAGGTGGAGCACCCTTTG
CTGAGTGGCCTCTTATACCCCGGACTGCAGGCTTTGGATGAAGAGTATTTAAAAGTAGAT
GCCCAATTTGGAGGCATTGATCAGAGAAAGATTTTCACCTTTGCAGAGAAGTACCTCCCT
GCACTTGGCTATTCAAAACGGGTCCATCTGATGAATCCTATGGTTCCAGGATTAACAGGC
AGCAAAATGAGCTCTTCAGAAGAGGAGTCCAAGATTGATCTCCTTGATCGGAAGGAGGAT
GTGAAGAAAAAACTGAAGAAGGCCTTCTGTGAGCCAGGAAATGTGGAGAACAATGGGGTT
CTGTCCTTCATCAAGCATGTCCTTTTTCCCCTTAAGTCCGAGTTTGTGATCCTACGAGAT
GAGAAATGGGGTGGAAACAAAACCTACACAGCTTACGTGGACCTGGAAAAGGACTTTGCT
GCTGAGGTTGTACATCCTGGAGACCTGAAGAATTCTGTTGAAGTCGCACTGAACAAGTTG
CTGGATCCAATCCGGGAAAAGTTTAATACCCCTGCCCTGAAAAAACTGGCCAGCGCTGCC
TACCCAGATCCCTCAAAGCAGAAGCCAATGGCCAAAGGCCCTGCCAAGAATTCAGAACCA
GAGGAGGTCATCCCATCCCGGCTGGATATCCGTGTGGGGAAAATCATCACTGTGGAGAAG
CACCCAGATGCAGACAGCCTGTATGTAGAGAAGATTGACGTGGGGGAAGCTGAACCACGG
ACTGTGGTGAGCGGCCTCGTACAGTTCGTGCCCAAGGAGGAACTGCAGGACAGGCTGGTA
GTGGTGCTGTGCAACCTGAAACCCCAGAAGATGAGAGGAGTCGAGTCCCAAGGCATGCTT
CTGTGTGCTTCTATAGAAGGGATAAACCGCCAGGTTGAACCTCTGGACCCTCCGGCAGGC
TCTGCTCCTGGTGAGCACGTGTTTGTGAAGGGCTATGAAAAGGGCCAACCAGATGAGGAG
CTCAAGCCCAAGAAGAAAGTCTTCGAGAAGTTGCAGGCTGACTTCAAAATTTCTGAGGAG
TGCATCGCACAGTGGAAGCAAACCAACTTCATGACCAAGCTGGGCTCCATTTCCTGTAAA
TCGCTGAAAGGGGGGAACATTAGCTAG

Clone variation with respect to NM_003680.3
1218 g=>c

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_003680 unedited
GGCGCCCCGTTCCACGCTAGGGCGGTAGGCAAGTCCGGTGGGAGGTCTATATAAGCAGAG
CTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGCGAATTC
GGCACGAGCGACGGTGACCCAGGAAGGGGCTCTGGTGCCGGGCTGAGCGGGGGAAGCAGG
GGTAGCGGAGCCATGGGGGACGCTCCTTTTTTGTTGAGAAACTGCACCTTATCACCCGGA
ACCTGCAGGAGGTTCTGGGGGAAGAGAAGCTGAAGGAGATACTGAAGGAGCGGGAACTTA
AAATTTACTGGGGAACGGCAACCACGGGCAAACCACATGTGGCTTACTTTGTGCCCATGT
CAAAGATTGCAGACTTCTTAAAGGCAGGGTGTGAGGTAACAATTCTGTTTGCGGACCTCC
ACGCATACCTGGATAACATGAAAGCCCCATGGGAACTTCTAGAACTCCGAGTCAGTTACT
ATGAGAATGTGATCAAAGCAATGCTGGAGAGCATTGGTGTGCCCTTGGAGAAGCTCAAGT
TCATCAAAGGCACTGATTACCAGCTCAGCAAAGAGTACACACTAGATGTGTACAGACTCT
CCTCCGTGGTCACACAGCACGATTCCAAGAAGGCTGGAGCTGAGGTGGTAAAGCAGGTGG
AGCACCCTTTGCTGAGTGGCCTCTTATACCCCGGACTGCAAGCTTTGGATGAAGAGTATT
TAAAAGTAGATGCCCAATTTGGNANGCATTGATCAGAGAAAGATTTTCACCCTTGCAGAG
AAGTACCTCCCTGCACTTGGCTATTCAAACGGGTCCATCTGATGAATCCTATGGTTCCGG
ATTAAACAGCAGCANAATGAGCTCTTCAGAAGAGGAGTCAAGTATGATCTCCTTGATCGG
AAAGGAGATGTGAAGAAAAAACTGTAGAAGGCCTTCTGGGAGCCAGGAATGTGGANAACA
TGGGGTTCTGTCTTCATCAGCATGTCTTTTTTCCTT

Restriction Sites:	NotI-NotI
ACCN:	NM_003680
Insert Size:	2600 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:	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_003680.2, NP_003671.1
RefSeq Size:	3137 bp
RefSeq ORF:	1587 bp
Locus ID:	8565
UniProt ID:	P54577
Cytogenetics:	1p35.1
Domains:	tRNA-synt_1b, tRNA_bind
Protein Families:	Druggable Genome
Protein Pathways:	Aminoacyl-tRNA biosynthesis
Gene Summary:	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. Tyrosyl-tRNA synthetase belongs to the class I tRNA synthetase family. Cytokine activities have also been observed for the human tyrosyl-tRNA synthetase, after it is split into two parts, an N-terminal fragment that harbors the catalytic site and a C-terminal fragment found only in the mammalian enzyme. The N-terminal fragment is an interleukin-8-like cytokine, whereas the released C-terminal fragment is an EMAP II-like cytokine. [provided by RefSeq, Jul 2008]