

Product datasheet for RC213391

WARS2 (NM_201263) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
 Product Name: WARS2 (NM_201263) Human Tagged ORF Clone
 Tag: Myc-DDK
 Symbol: WARS2
 Synonyms: mtTrpRS; NEMMLAS; TrpRS
 Vector: pCMV6-Entry (PS100001)
 E. coli Selection: Kanamycin (25 ug/mL)
 Cell Selection: Neomycin
 ORF Nucleotide Sequence: >RC213391 representing NM_201263
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCGCTGCACTCAATGCGGAAAGCGCGTGAGCGCTGGAGCTTCATCCGGGCACTTCATAAGGGATCCG
 CAGCTGCTCCCGCTCTCCAGAAAGACAGCAAGAAGCGAGTATTTCCGGCATTCAACCTACAGGAATCCT
 CCACCTGGGCAATTACCTGGGAGCCATTGAGAGCTGGGTGAGTTACAGGATGAATATGACTCTGTATTA
 TACAGCATTGTTGACCTCCACTCCATTACTGTCCCCAAGACCCAGCTGTCTTCGGCAGAGCATCTGG
 ACATGACTGCTGTTCTTCTTGCCTGTGGCATAAACCCGGAAAAAAGCATCCTTTTCCAACAATCTCAGGT
 GTCTGAACACACACAATTAAGTTGGATCCTTTCCTGCATGGTCAGACTACCTCGATTACAACATTTACAT
 CAGTGGAAAGGCAAAGACTACCAAGCAGAAGCAGATGGCACGGTGGGCCTGCTCACATACCCAGTACTCC
 AGGCAGCCGACATTCTGTTGTACAAGTCCACACACGTTCTGTTGGGGAGGATCAAGTCCAGCACATGGA
 ACTAGTTCAGGATCTAGCACAAAGTTTCAACAAGAAGTATGGGGAGTTCTTTCCAGTGCCCGAGTCCATT
 CTCAGTATGTGTGTTGGTGTTTTAAACC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC213391 representing NM_201263
 Red=Cloning site Green=Tags(s)

MALHSMRKARERWSFIRALHKGSAAPALQKDSKKRVFSGIQPTGILHLGNLGAIESWVRLQDEYDSVL
 YSIVDLHSITVPQDPAVLRQSI LDMTAVLLACGINPEKSILFQQSQVSEHTQLSWILSCMVRLPRLQHLH
 QWKAKTTKQKHDGTVGLLTYPVLQAADILLYKSTHVPVGEDQVQHMLVQDLAQGFNKKYGEFFPVPESI
 LSMCVLVFLT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

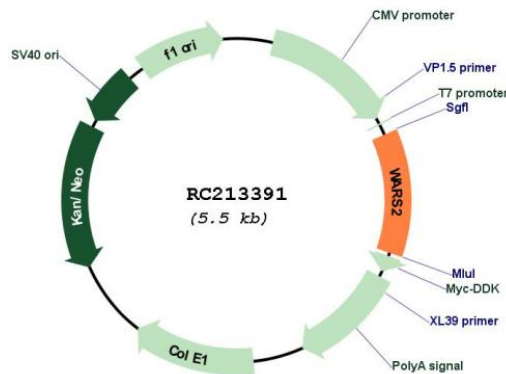
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_201263

ORF Size: 660 bp

OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
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_201263.2 , NP_957715.1
RefSeq Size:	2835 bp
RefSeq ORF:	663 bp
Locus ID:	10352
UniProt ID:	Q9UGM6
Cytogenetics:	1p12
Protein Families:	Druggable Genome
Protein Pathways:	Aminoacyl-tRNA biosynthesis, Tryptophan metabolism
MW:	24.8 kDa
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. Two forms of tryptophanyl-tRNA synthetase exist, a cytoplasmic form, named WARS, and a mitochondrial form, named WARS2. This gene encodes the mitochondrial tryptophanyl-tRNA synthetase. Two alternative transcripts encoding different isoforms have been described. [provided by RefSeq, Jul 2008]