

Product datasheet for **RG213391**

WARS2 (NM_201263) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	WARS2 (NM_201263) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	WARS2
Synonyms:	mtTrpRS; NEMMLAS; TrpRS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG213391 representing NM_201263 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGCTGCACTCAATGCGAAAGCGCGTGAGCGCTGGAGCTTCATCCGGGCACCTCATAAGGGATCCG
CAGCTGCTCCCGCTCTCCAGAAAGACAGCAAGAAGCGAGTATTTCCGGCATTCAACCTACAGGAATCCT
CCACCTGGGCAATTACCTGGGAGCCATTGAGAGCTGGGTGAGGTTACAGGATGAATATGACTCTGTATTA
TACAGCATTGTTGACCTCACTCCATTACTGTCCCAAGACCCAGCTGTCCTTCGGCAGAGCATCTGG
ACATGACTGCTGTTCTTCTTGCCTGTGGCATAAACCCGAAAAAAGCATCCTTTTCCAACAATCTCAGGT
GTCTGAACACACACAATTAAGTTGGATCCTTTCCTGCATGGTCAGACTACCTCGATTACAACATTTACAT
CAGTGGAAAGGCAAAGACTACCAAGCAGAAGCAGATGGCACGGTGGGCCTGCTCACATACCCAGTACTCC
AGGCAGCCGACATTCTGTTGTACAAGTCCACACACGTTCTGTTGGGGAGGATCAAGTCCAGCACATGGA
ACTAGTTCAGGATCTAGCACAAGGTTTCAACAAGAAGTATGGGGAGTTCTTTCCAGTGCCCGAGTCCATT
CTCAGTATGTGTGTGTTGGTGTTTTAAACC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG213391 representing NM_201263
Red=Cloning site Green=Tags(s)

MALHSMRKARERWSFIRALHKGSAAAPALQKDSKRVFSGIQPTGILHLGNLGAIESWVRLQDEYDSVL
 YSIVDLHSITVPQDPAVLRQSIDMTAVLLACGINPEKSILFQQSQVSEHTQLSWILSCMVRLPRLQHLH
 QWKAKTTKQKHDGTVGLLTYPVLQAADILLYKSTHVPVGEDQVQHMLVQDLAQGFNKKYGEFFVPVESI
 LSMCVLVFLT

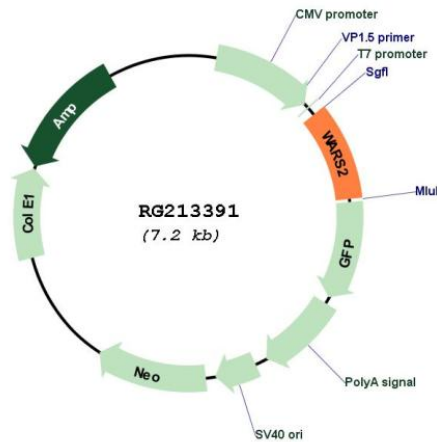
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



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
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]