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 RG208448

WARS2 (NM_015836) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	WARS2 (NM_015836) 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:

>RG208448 representing NM_015836
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGCTGCACTCAATGCGGAAAGCGCGTGAGCGCTGGAGCTTCATCCGGGCACTTCATAAGGGATCCG
CAGCTGCTCCCGCTCTCCAGAAAGACAGCAAGAAGCGAGTATTTTCCGGCATTCAACCTACAGGAATCCT
CCACCTGAGCAATTACCTGGGAGCCATTGAGAGCTGGGTGAGGTTACAGGATGAATATGACTCTGTATTA
TACAGCATTGTTGACCTCCACTCCATTACTGTCCCCCAAGACCCAGCTGTCCTTCGGCAGAGCATCCTGG
ACATGACTGCTGTTCTTCTTGCCTGTGGCATAAACCCGGAAAAAAGCATCCTTTTCCAACAATCTCAGGT
GTCTGAACACACACAATTAAGTTGGATCCTTTCCTGCATGGTCAGACTACCTCGATTACAACATTTACAT
CAGTGGAAGGCAAAGACTACCAAGCAGAAGCACGATGGCACGGTGGGCCTGCTCACATACCCAGTACTCC
AGGCAGCCGACATTCTGTTGTACAAGTCCACACACGTTCCTGTTGGGGAGGATCAAGTCCAGCACATGGA
ACTAGTTCAGGATCTAGCACAAGGTTTCAACAAGAAGTATGGGGAGTTCTTTCCAGTGCCCGAGTCCATT
CTCACATCCATGAAGAAGGTAAAATCCCTACGTGATCCTTCTGCCAAAATGTCGAAATCAGACCCTGACA
AACTGGCCACCGTCCGAATAACAGACAGCCCAGAGGAGATAGTGCAGAAATTCCGCAAGGCTGTGACAGA
CTTCACCTCGGAGGTCACCTATGACCCGGCTGGCCGCGCTGGCGTGTCCAACATAGTGGCGGTGCATGCC
GCGGTGACGGGGCTCTCCGTGGAGGAAGTGGTGCGCCGCAGCGCGGGCATGAACACTGCTCGCTACAAGC
TGGCCGTGGCAGATGCTGTGATTGAGAAGTTTGCCCCAATTAAGCGTGAAATTGAAAAACTGAAGCTGGA
CAAGGACCATTTAGAGAAGGTTTTACAAATTGGATCAGCAAAAGCCAAAGAATTAGCATACACTGTGTGC
CAGGAGGTGAAGAAATTGGTGGGTTTTCTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

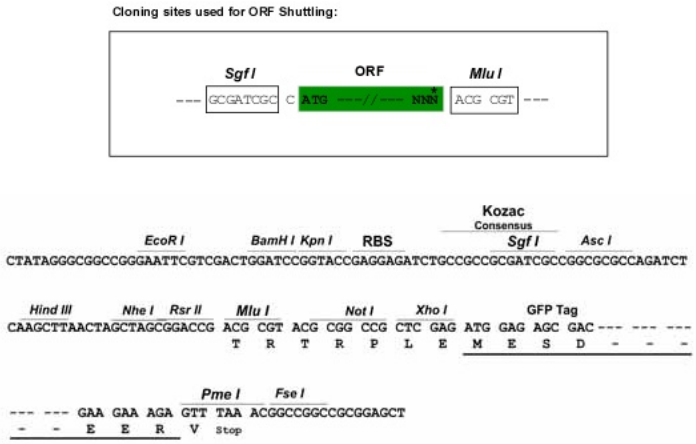
>RG208448 representing NM_015836
Red=Cloning site Green=Tags(s)

MALHSMRKARERWSFIRALHKGSAAAPALQKDSKKRVFSGIQPTGILHLSNYLGAIESWVRLQDEYDSVL
YSIVDLHSITVPQDPAVLRQSILDMTAVLLACGINPEKSILFQQSQVSEHTQLSWILSCMVRLPRLQHLH
QWKAKTTKQKHDGTVGLLTYPVLQAADILLYKSTHVPVGEDQVQHMELVQDLAQGFNKKYGEFFPVPESI
LTSMKKVKSLRDPSAKMSKSDPDKLATVRITDSPEEIVQKFRKAVTDFTSEVTYDPAGRAGVSNIVAVHA
AVTGLSVEEVVRRSAGMNTARYKLAVADAVIEKFAPIKREIEKLKLDKDHLEKVLQIGSAKAKELAYTVC
QEVKKLVGFL

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_015836

ORF Size: 1080 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: 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_015836.3, NP_056651.1

RefSeq Size: 2806 bp

RefSeq ORF: 1083 bp

Locus ID: 10352

UniProt ID: Q9UGM6

Cytogenetics: 1p12

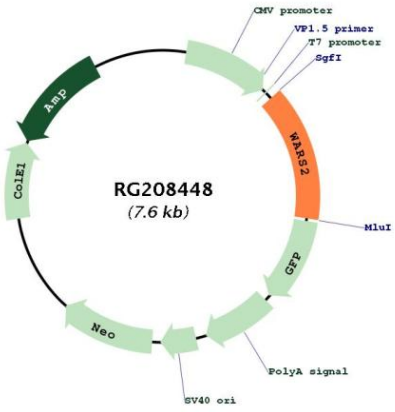
Domains: tRNA-synt_1b

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]

Product images:



Circular map for RG208448