

Product datasheet for **RG202932**

Methionyl tRNA synthetase (MARS) (NM_004990) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Methionyl tRNA synthetase (MARS) (NM_004990) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Methionyl tRNA synthetase
Synonyms:	CMT2U; ILFS2; ILLD; MARS; METRS; MRS; MTRNS; SPG70
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG202932 representing NM_004990
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

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ACGCGTACGCGGCCGCTCGAG – GFP Tag – **GTTTAA**

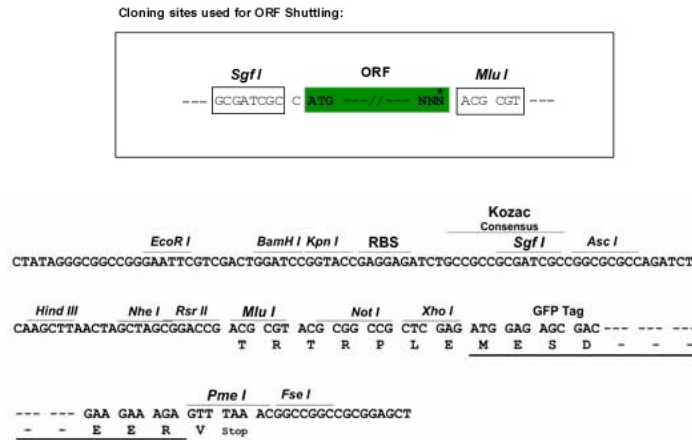
Protein Sequence: >RG202932 representing NM_004990
 Red=Cloning site Green=Tags(s)

MRLFVSDGVPGLPVLAAAGRARGRAEVLISTVGPEDCVVPFLTRPKVPVLQLDSGNYLFTSAICRYFF
 LLSGWEQDDL TNQWLEWEATELQPALSAALYYL VVQGGKGEDVLG SVRRAL THIDHLSRQNC PFLAGET
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 IRDALRSILTISRHNQYIQVNEPWKR IKGSEADRQRAGT VTGLAVNIAALLSVMLQPYMPTVSATIQAQ
 LQLPPPACSILLTNFLCTLPAGHQIGTVSPLFQKLENDQIESLRQRFGGGQAKTSPKPAVVETVTTAKPQ
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TRTRPLE - GFP Tag - V

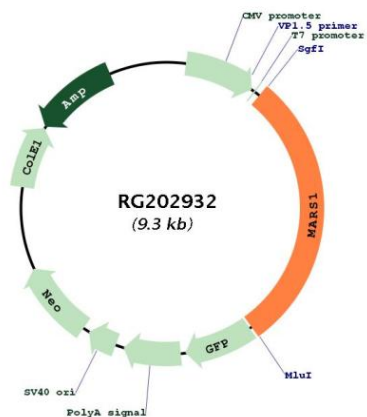
Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN:	NM_004990
ORF Size:	2700 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_004990.4
RefSeq Size:	2795 bp
RefSeq ORF:	2703 bp
Locus ID:	4141
UniProt ID:	P56192
Cytogenetics:	12q13.3
Domains:	WHEP-TRS, tRNA-synt_1, GST_C
Protein Families:	Druggable Genome
Protein Pathways:	Aminoacyl-tRNA biosynthesis, Selenoamino acid metabolism
Gene Summary:	This gene encodes a member of the class I family of aminoacyl-tRNA synthetases. These enzymes play a critical role in protein biosynthesis by charging tRNAs with their cognate amino acids. The encoded protein is a component of the multi-tRNA synthetase complex and catalyzes the ligation of methionine to tRNA molecules. [provided by RefSeq, Jan 2011]

Product images:



Circular map for RG202932