

Product datasheet for **MG218764**

Mars1 (NM_001171582) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mars1 (NM_001171582) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Mars1
Synonyms:	M; Mars; Met; Metrs; Mtrns
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG218764 representing NM_001171582
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGACTGTTCTGTGAGCGAGGGTTCCCGGGGAGCCTGCCCGTCTGGCTGCGGCCGAGGGCCCGGG
 GTCGGGGCGAGCTGCTCATCAGCACCGTAGGCCCGAAGAGTGTGTGGTACCATTCTTACCGGCCTAA
 GGTCCCTGTCTTGACAGCTGGATAGTGGCAACTACCTCTTCTCTGCTAGTGAATCTGCCGATATTTTTT
 CTGTTATGTGGCTGGGAACAAGATGATCTACCAACCAGTGGCTGGAATGGGAGGCAACAGAAGTGCAGC
 CAGTTCTGTCTGCTGCCCTACACTGTCTAGTGGTTCAAGGCAAGAAAGGGGAAGATATACTTGGCCCACT
 TCGGAGAGTCTGACTCACATTGATCACAGCTTGAGTCGTCAAAAGTGCCTTTCTGGCTGGGGACACA
 GAATCTCTAGCTGACATTGTTTTGTGGGAGCACTGTATCCTTTACTGCAAGACCCAGCTTACCTCCCTG
 AGGAGTTGGTGCCCTGCAAAGTTGGTTCAGACACTGAGTACCCAGGAACCGTGTGAGCGAGCTGCAGA
 GACGGTGTAAAACAGCAGGGTGTCTGGCACTTCGTCTGTACCTCCAGAAACAGCCACAGCCTCAGCCC
 CCGCCTCCTGAGGGGAGAACTGTGAGCAACGAGCTGGAGGAAGAGGAAGTGGCTACCTTGTCTGAGGAGG
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 TCCAGTGTTCCTGTGCCTGGAGAGAGGAATGTTCTCATCACCAGTGCCTCCCTATGTCAACAATGTC
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 AGTGAATACCTCTATCTGTGTGGTACAGATGAGTATGGTACTGCGACAGAGACCAAGGCCATGGAGGA
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 ATATCGTTCGATACTTTCCGGCGCACTACACTCCTCAGCAGACCAAAATCACCCAGGACATCTCCAGA
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 ACAAGGTATTTACGCTGGTTGATGCTACTATTGGCTACGTGTCCATCACAGCCAACACACAGACCA
 ATGGGAGAAATGGTGAAGAACCAGAACAAGTGGACCTTACCAGTTCATGGCCAAAGACAATGTTCCC
 TTCATGGCTTGGTCTTCCGTGTTGAGTCTAGGAGCTGAGGACAACACACCTGGTCAAGCAGATCA
 TTGCTACAGAGTACCTGAACTATGAGGATGGGAAATCTCTAAGAGCCGGGGCATAGGAGTGTGGAGA
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 ACCCAGCTGCAGCTCCCACCTGCAGCCTGCCGCATCCTTGCCACAAGCTTCATTTGTACCTTGCCAGCAG
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 ACGTCGTCGGGAACTGAAAGCACAGAAGGCAGACAAGAACCAGGTTGCTGCAGAGGTGGCTAAACTCTT
 GGATCTAAAGAACAGTTGGCTTTGGCTGAGGGGAAACCCATTGAAACTCCTAAAGGCAAGAAGAAAAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - **GTTTAA**

Protein Sequence: >MG218764 representing NM_001171582
 Red=Cloning site Green=Tags(s)

MRLFVSEGPSGLPVLAAAARARGRAELLISTVGPEECVVPFLTRPKVPVLQLDSGNLFSASAICRYFF
 LLCGWEQDDL TNQWLEWEATELQPVL SAALHCLVVOGKKGEDILGPLRRVLTIDHLSRQNCPPFLAGDT
 ESLADIVLWGALYPLLQDPAYLPEELGALQSWFQTLSTQEPQRAAETVLKQQGV LALRLYLQKQPQP
 PPPEGRTVSNELEEEELATLSEEDIVTAVAWEKGLLESLPPLKQQHPVLPVPGERNVLITSALPVVNV
 PHLGNIIGCVLSADVFARYCRLRQWNTLYLCGTDEYGTATETKAMEEGLTPREICDKYHAIHADIYRWF
 ISFDTFGRITTPQTKITQDIFQRLLTRGFVLRDTVEQLRCERCARFLADRFVEGVPCFCGYEEARGDQC
 DRCGKLINAIELKKPQCKICRSCPVVRSSQHLFLDLPKLEKRLDGLGKTVPGSDWTPNARFIIRSWLRD
 GLKPRCITRDLKWTGPVPLEGFEDKVFYVWF DATIGYVSITANYTDQWEKWWKNPEQVDLYQFMAKDNVP
 FHGLVFPCSVLGAEDNYTLVKHIIATEYLNIEDGKFSKSRGIGVFGDMAKDTGIPADIWRFYLLYRPEG
 QDSAFSWTDLLIKNNSSELLNNGNFINRAGMFVSKFFGGCVPEMALTPDDRRLVAHVSWELQHYHQLLEK
 VRIRDALRSILTISRHNQYIQVNEPWKRKIGGEMDRQRAGVTGMVNMAALLSVMLQPYMPTVSTIQ
 TQLQLPPAACRILATSFICTLPAGHRIGTVSPLFQKLENDQIENLRQRFGGGQLEESLELKAKGSPKPA
 VEAVTAAGSQHIQTLTDEVTKQGNVVRELKAQKADKNQVAEVAKLLDLKQLALAEKPIETPKGKKKK

TRTRPLE - GFP Tag - V

Restriction Sites:

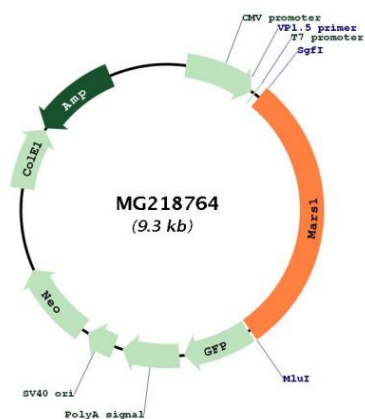
SgfI-MluI

Cloning Scheme:



ACCN:	NM_001171582
ORF Size:	2730 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_001171582.1 , NP_001165053.1
RefSeq Size:	2972 bp
RefSeq ORF:	2733 bp
Locus ID:	216443
UniProt ID:	Q68FL6
Cytogenetics:	10 D3
Gene Summary:	The encoded protein belongs to the class I family of tRNA synthetases, a class of enzymes that charge tRNAs with their cognate amino acids. The related human gene product is essential for the translation initiation of mRNAs. This gene has an overlapping 3' UTR tail-to-tail arrangement with an adjacent gene on the opposite strand that encodes an inhibitor of the CCAAT/enhancer-binding protein's DNA binding activity. This arrangement, conserved in human and mouse, may be involved in mRNA stability and possible functional and regulatory interaction of these adjacent overlapping genes. Alternative splicing results in multiple transcript variants.[provided by RefSeq, Jan 2010]

Product images:



Circular map for MG218764