

Product datasheet for MR218764L4

Mars (Mars1) (NM_001171582) Mouse Tagged Lenti ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Mars (Mars1) (NM_001171582) Mouse Tagged Lenti ORF Clone |
| Tag: | mGFP |
| Symbol: | Mars1 |
| Synonyms: | M; Mars; Met; Metrs; Mtrns |
| Mammalian Cell Selection: | Puromycin |
| Vector: | pLenti-C-mGFP-P2A-Puro (PS100093) |
| E. coli Selection: | Chloramphenicol (34 ug/mL) |
| ORF Nucleotide Sequence: | The ORF insert of this clone is exactly the same as(MR218764). |
| Restriction Sites: | Sgfl-MluI |
| Cloning Scheme: | |

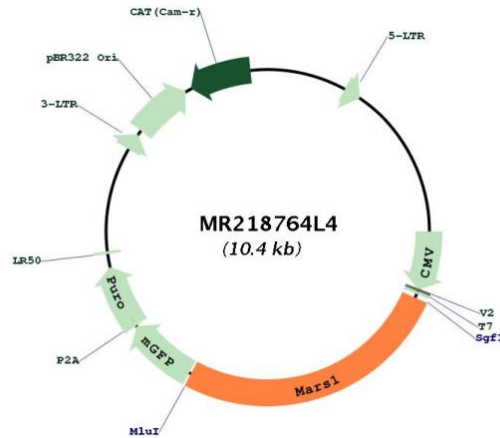
Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF.



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Plasmid Map:


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:

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]