

Product datasheet for **RR206361**

Maip1 (NM_001004251) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Maip1 (NM_001004251) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Maip1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RR206361 representing NM_001004251 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGCTGGCCGCCCGTCTCTACCTCTTCCCCTGCTTTCTTGGTCGCTGCCCGCCGGGCCACCAGAC
 TCAGGACTCTCCGTACCACCGAGGTGAAGCTGACGCTCAATGAATTTGCTGTCTGTGCCCGCTCGCCT
 GGGCTCAAGCGCGGCTCCGATCCCTCGCTGTACTTGGGCCTGGCAAGCCCGACGATGCGTTCCTGGGGC
 CCCCAGGGCCCTTCTCGGCCGGGCAGAACATTCTCCAGCCCTCGCTTCTTTACCCGCTAGTCCCATT
 GCAGTTACAGCACCGAGGAGCAGCCCCAGCAACGCCAGAGAACCAGAATGATCATTCTGGGATTTTCCAA
 TCCCATCAACTGGGTCCGACTCGAATTTATGCCTTCTTATCTGGGCCTATTTGACAAAGAGTTCAGT
 ATCGCTGAGTTCTCTGAAGGGGCAAAGCAGGCTTTTGCTTATGTATCCAAGTTGCTGTACAGTGTAAT
 TTGATCTATTGGAAGAACTTGTAGCCAAAGAGGTGCTGCAGGTATTAAGAAAAGGTTGCTTCATTGTC
 TGATAACCATAAGAATGCACTTGTGCAGACATAGATGATATTGTCTACACATCAACAGGCGACATCTCT
 ATTTACTATGATGAGAAAGGAAGGAAGTTCGTTAACATCCTGATGTGCTTTTGGTATCTGACTAGTGCCA
 ACATCCCCAGTGAGTCTTTAAGTGGAGCCAATGTGTTCCAGGTGAAGCTGGGGGATCAGAGCGTGGAGAC
 TAAACAGCTGCTCAGTGCAGTTATGAATTTAGAGGGAATTTACACAAGGAGTAAAGCCTGACTGGACT
 ATTGCACGGATTGAGCACTCAAAGTTACTAGAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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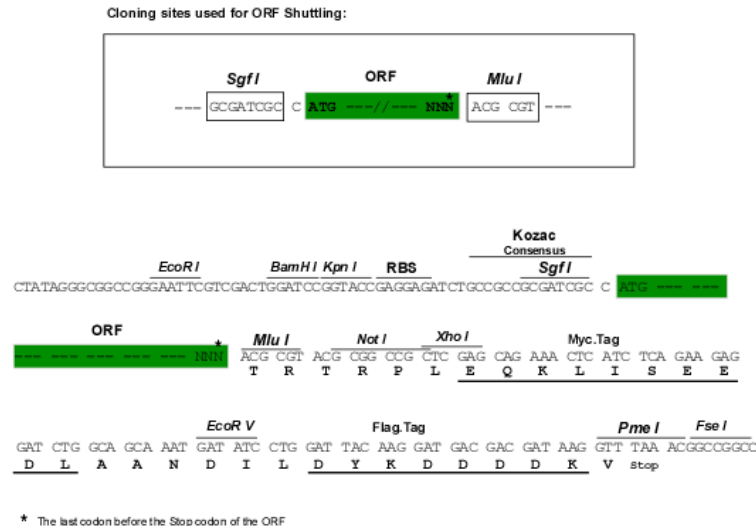
Protein Sequence: >RR206361 representing NM_001004251
 Red=Cloning site Green=Tags(s)

MALAARLLPLLLSWSLPGRATRLRLTTEVKLTLEFCCLCRRRLGSSAAPIRCTWAWASPTMRSWG
 PRRPLLGRAEHSPALASLPASPIRSYSTEEQPQQRQTRMIILGFSNPINWVRTRIYAFLIWAYFDKEFS
 IAEFSEGAQAFAYVSKLLSQCKFDLLEELVAKEVLQVLKEKVASLSDNHKNALAADIDDIYVTSTGDIS
 IYYDEKGRKFVNILMCFWYLT SANIPSESLSGANVFQVKLGDQSVETKQLLSASYEFQREFTQGVKPDWT
 IARIEHSKLLE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001004251

ORF Size: 873 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_001004251.1](#), [NP_001004251.1](#)

RefSeq Size: 1417 bp

RefSeq ORF: 876 bp

Locus ID: 301418

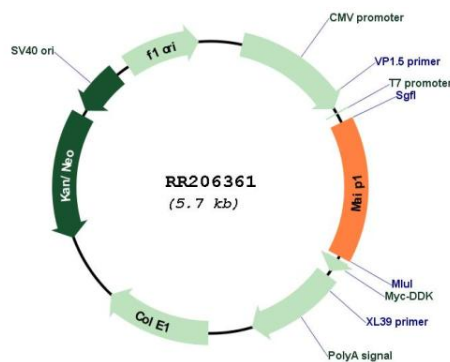
UniProt ID: [Q6AY04](#)

Cytogenetics: 9q31

MW: 33.1 kDa

Gene Summary: Promotes sorting of SMDT1/EMRE in mitochondria by ensuring its maturation. Interacts with the transit peptide region of SMDT1/EMRE precursor protein in the mitochondrial matrix, leading to protect it against protein degradation by YME1L1, thereby ensuring SMDT1/EMRE maturation by the mitochondrial processing peptidase (PMPCA and PMPCB).
[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR206361