

Product datasheet for **MR204112**

Mpst (NM_138670) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mpst (NM_138670) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mpst
Synonyms:	Mst
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR204112 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCGCCCCGCAACTTTCCGAGCTCTGGTGTCTGCGCAGTGGGTGGCGGAGGCTCTGAAGGCCCCGC
GCTCCTCACAGCCGCTGAAGTTACTGGACGCGTCTGGTACCTACCCAAGCTGGGCCGCGATGCACGACG
CGAGTTTGAGGAGCGCCACATCCCGGGCGCCCTTCTCGACATCGATCGTTGCAGTGACCACAGTCC
CCCTACGACCACATGCTGCCTAACGCCACGCACCTTCCGACTACGCGGGCAGCTTGGGCGTGAGCGCC
CCACGCACGTCGTGATCTACGACGGCAGTGACCAGGGCCTCTATTCCGCTCCGCGGTCTGGTGGATGTT
CCGCGCCTTCGGCCACCACTCTGTGTCATTGCTGGACGGCGGCTTCCGCCACTGGCTGAATCAGAACCTG
CCAATCAGCTCCGGCAAAGCCACTCGGAGCCCGGAGTTTCAGCGCGCAGCTCGATCCCTCTTTCATCA
AGACCCACGAGGACATCCTGGAGAACTTGGATGCCCGGCGCTTCCAGGTGGTGGACGCCCGCGCAGCTGG
CCGTTTCCAAGGCACCCAGCCAGAACCCTGAGATGGCATCGAACCTGGCCACATCCCTGGCTCAGTAAAC
ATCCCCTTCACTGAATTCCTGACCAACGAAGGCCTGGAGAAGAGCCCAGAGGAGATCAAACGCCTGTTTA
AGGAGAAGAAGGTGGACCTGTCTAAGCCCTTGGTAGCCACGTGTGGCTCCGGTGTACAGCCTGCCACGT
GGTCTGGGGCCTTCTCTGTGGCAAGTCAGACGTGCCTGTCTATGATGGCTCCTGGGTAGAGTGGTAC
ATGCGTGCCAGCCAGAGCATATCATCTCTGAGGGCCGAGGGAAGACCCAG

AG**CGGACCG**ACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >MR204112 protein sequence
Red=Cloning site Green=Tags(s)

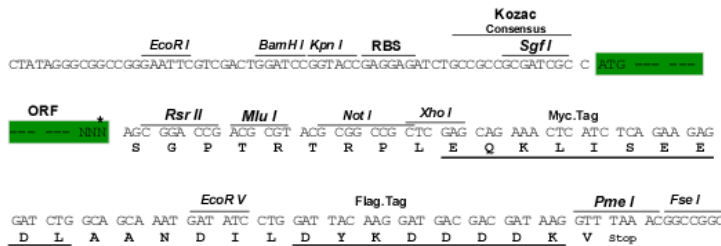
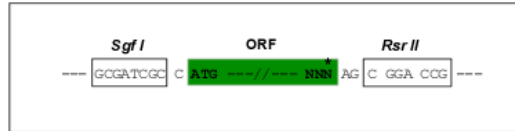
MAAPQLFRALVSAQWVAEALKAPRSSQPLKLLDASWYLPKLGRDARREFEERHIPGAFFDIDRCSDHTS
 PYDHMLPNATHFADYAGSLGVSAAATHVVIYDGSQGLYSAPRVWMMFRAFHHHSVSLLDGGFRHWLNQNL
 PISSGKSHSEPAEFSAQLDPSFIKTHEDILENLDARRFQVVDARAAGRFQGTQPEPRDGIPEGHIPGSVN
 IPFTEFLTNEGLEKSPEEIKRFLFKEKKVDLSKPLVATCGSGVTACHVVLGAFLCGKSDVPVYDGSWVEWY
 MRAQPEHIISEGRGKTQ

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_138670

ORF Size: 894 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_138670.2](#), [NP_619611.2](#)

RefSeq Size: 1426 bp

RefSeq ORF: 894 bp

Locus ID: 246221

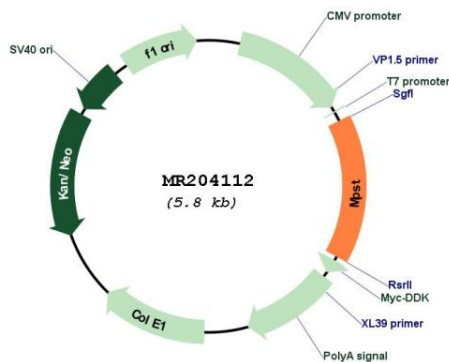
UniProt ID: [Q99J99](#)

Cytogenetics: 15 E1

MW: 33 kDa

Gene Summary: Transfer of a sulfur ion to cyanide or to other thiol compounds. Also has weak rhodanese activity. Detoxifies cyanide and is required for thiosulfate biosynthesis. Acts as an antioxidant. In combination with cysteine aminotransferase (CAT), contributes to the catabolism of cysteine and is an important producer of hydrogen sulfide in the brain, retina and vascular endothelial cells. Hydrogen sulfide H₂S is an important synaptic modulator, signaling molecule, smooth muscle contractor and neuroprotectant. Its production by the 3MST/CAT pathway is regulated by calcium ions.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR204112