

## Product datasheet for MR218627

### Mpst (NM\_001162493) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Mpst (NM_001162493) 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:	>MR218627 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGCCGCCCCGCAACTTTCCGAGCTCTGGTGTCTGCGCAGTGGGTGGCGGAGGCTCTGAAGGCCCCGC  
GCTCCTCACAGCCGCTGAAGTTACTGGACGCGTCTGGTACCTACCCAAGCTGGGCCGCGATGCACGACG  
CGAGTTTGAGGAGCGCCACATCCCGGGCGCCCTTCTCGACATCGATCGTTGCAGTGACCACAGTCC  
CCCTACGACCACATGCTGCCTAACGCCACGCACCTTCCGACTACGCGGGCAGCTTGGGCGTGAGCGCC  
CCACGCAGTCTGTGATCTACGACGGCAGTGACCAGGGCCCTATTCCGCTCCGCGGTCTGGTGGATGTT  
CCGCGCCTTCGGCCACCACTCTGTGTCATTGCTGGACGGCGGCTCCGCCACTGGCTGAATCAGAACCTG  
CCAATCAGCTCCGGCAAAGCCACTCGGAGCCCGGAGTTTCAGCGCGCAGCTCGATCCCTCTTTCATCA  
AGACCCACGAGGACATCCTGGAGAACTTGGATGCCCGGCGCTTCCAGGTGGTGGACGCCCGCGCAGCTGG  
CCGTTTCCAAGGCACCCAGCCAGAACCCTGAGATGGCATCGAACCTGGCCACATCCCTGGCTCAGTAAAC  
ATCCCGTTCACTGAATTCCTGACCAACGAAGGCCTGGAGAAGAGCCCAGAGGAGATCAAACGCCTGTTTA  
AGGAGAAGAAGGTGGACCTGTCTAAGCCCTTGGTAGCCACGTGTGGCTCCGGTGTACAGCCTGCCACGT  
GGTCTGGGGCCTTCTCTGTGGCAAGTCAGACGTGCCTGTCTATGATGGCTCCTGGGTAGAGTGGTAC  
ATGCGTGCCAGCCAGAGCATATCATCTCTGAGGGCCGAGGGAAGACCCAG

AG**CGGACCG**ACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
TGGATTACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >MR218627 protein sequence  
Red=Cloning site Green=Tags(s)

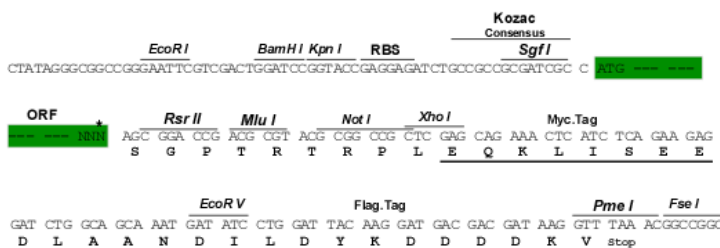
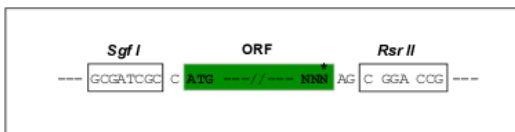
MAAPQLFRALVSAQWVAEALKAPRSSQPLKLLDASWYLPKLGRDARREFEERHIPGAFFDIDRCSDHTS  
 PYDHMLPNATHFADYAGSLGVSAAATHVVIYDGSQGPYSAPRVWMMFRAFHHVSVLLDGGFRHWNQNL  
 PISSGKSHSEPAEFSAQLDPSFIKTHEDILENLDARRFQVVDARAAGRFQGTQPEPRDGIPEGHIPGSVN  
 IPFTEFLTNEGLEKSPEEIKRFLFKEKKVDLSKPLVATCGSGVTACHVVLGAFLCGKSDVPVYDGSWVEWY  
 MRAQPEHIISEGRGKTQ

SGPTRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** NM\_001162493

**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\\_001162493.1](#), [NP\\_001155965.1](#)

**RefSeq Size:** 1292 bp

**RefSeq ORF:** 894 bp

**Locus ID:** 246221

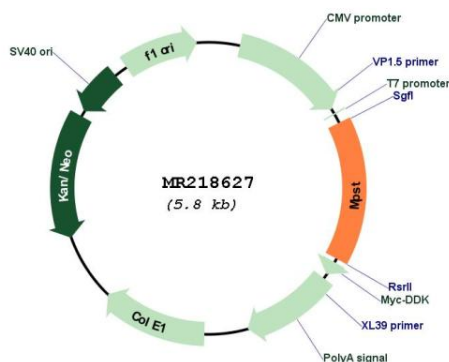
**UniProt ID:** [Q99J99](#)

**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 H<sub>2</sub>S 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 MR218627