

Product datasheet for **SC301784**

MPST (NM_001013436) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MPST (NM_001013436) Human Untagged Clone
Tag:	Tag Free
Symbol:	MPST
Synonyms:	MST; TST2; TUM1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC301784 representing NM_001013436. Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGTCGACTG
 GATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**
 ATGGCTTCGCGCAGCTCTGCCGCGCTGGTGTGCGCGCAATGGGTGGCGGAGGCGCTGCGGGCCCCG
 CGCGCTGGGCAGCCTCTGCAGCTGCTGGACGCTCCTGGTACCTGCCGAAGCTGGGGCGCGACGCGCA
 CGCGAGTTCGAGGAGCGCCACATCCCGGGCGCGCTTTCTTCGACATCGACCAGTGCAGCGACCGCACC
 TCGCCCTACGACCACATGCTGCCGGGGCCGAGCATTTGCGGAGTACGAGGCCGCTGGGCGTGGGC
 GCGGCCACCCACGTCGTGATCTACGACGCCAGCGACCAGGGCCTCTACTCCGCCCGCGCTCTGGTGG
 ATGTTCCGCGCCTTCGGCCACCACGCCGTGCTACTGCTTGATGGCGGCCCTCGCCACTGGCTGCGCCAG
 AACCTCCCGCTCAGCTCCGGCAAGAGCCAACCTGCTCCCGCCGAGTTCGCGCTCAGCTCGACCCCGCC
 TTCATCAAGACCTACGAGGACATCAAGGAGAACCTGGAATCCCGCGCTTCCAGGTGGTGGACTCCCGA
 GCCACTGGCAGGTTCCGCGGCACCGAGCCCGAGCCCCGAGACGGCATTGAACCTGGCCACATCCCAGGT
 ACCGTGAACATCCCTTCACAGACTTCCTGAGCCAGGAGGGGCTGGAGAAGAGCCCTGAGGAGATCCGC
 CATCTGTTCCAGGAGAAGAAAGTGGACCTGTCTAAGCCACTGGTGGCCACGTGTGGCTCTGGCGTACA
 GCCTGCCACGTGGCACTAGGGGCTACCTCTGCGGCAAGCCAGACGTGCCATCTACGATGGCTCCTGG
 GTGGAGTGGTACATGCGCGCCCGGCCGAGGATGTCATCTCAGAGGGCCGGGGAAGACCCACTGA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
 TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites:	SgfI-MluI
ACCN:	NM_001013436
Insert Size:	894 bp


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OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<u>NM_001013436.2</u>
RefSeq Size:	1371 bp
RefSeq ORF:	894 bp
Locus ID:	4357
UniProt ID:	<u>P25325</u>
Cytogenetics:	22q12.3
Protein Families:	Druggable Genome
Protein Pathways:	Cysteine and methionine metabolism, Metabolic pathways
MW:	33.2 kDa
Gene Summary:	<p>This protein encoded by this gene catalyzes the transfer of a sulfur ion from 3-mercaptopyruvate to cyanide or other thiol compounds. It may be involved in cysteine degradation and cyanide detoxification. There is confusion in literature between this protein (mercaptopyruvate sulfurtransferase, MPST), which appears to be cytoplasmic, and thiosulfate sulfurtransferase (rhodanese, TST, GeneID:7263), which is a mitochondrial protein. Deficiency in MPST activity has been implicated in a rare inheritable disorder known as mercaptolactate-cysteine disulfiduria (MCDU). Alternatively spliced transcript variants encoding same or different isoforms have been identified for this gene. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (2) uses an alternate donor splice site at the first exon compared to variant 1, resulting in translation initiation from a downstream AUG, and an isoform (2) with a shorter N-terminus compared to isoform 1. Transcript variants 2 and 3 encode the same isoform.</p>