

## Product datasheet for **RC234456**

### **MSTO1 (NM\_001256532) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MSTO1 (NM_001256532) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MSTO1
Synonyms:	LST005; MMYAT; MST
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC234456 representing NM\_001256532  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGGGCGGGCCCGGGAGGTGCTCACACTGCAGTTGGACATTTGCCGGTTTCGTGGCGCGCACT  
 GGTGGAACCAGCAGGATGCTGCGCTGGCCGAGCGACCGATTCCAAGGAGCCCCGGGAGAGCTGTGCC  
 CGACGTCCTGTATCGTACGGGCCGACGCTGCACGGCCAGGAGACCTACACGCCCGACTCATCCTCATG  
 GATCTGAAGGTAGTTTGTAGCTCCCTAAAAGAGGAAGGTGGACTTACAGGGACAAAAGTTGGATGCTG  
 CAATAGCATGGCAGGGGAAGCTCACCACACAAAAGGAACTCTATCCAAGAACCCTTATCTCCAAGA  
 CTTTCTGAGTGCAGAGGGAGTGTGAGTGTGTTGCTGGAGGGTCAAATCCATTCCAATGGCAA  
 GGTTCCTCACCCTCCACCGTACAACCTCAAAACCCTTATCCCTACAGAGGCCAGCATCAGGGTCT  
 GGTGAGACTTCTCAGAGTCCATCTCCATCCCCGGAGCATCTGTATGATTGAGAAGTACAACCACGATGG  
 GGAAGCAGGTGCGCTGGAGGCTTTGGCCAAGGGGAAAGTGTCTAAAGGAACCAAGTACCAGGAAGAG  
 CTGGAGGACAGGCTGCATTTCTACGTGGAGGAATGTGACTACTTGCAGGGCTTCCAGATCCTGTGTGACC  
 TGCACGATGGCTTCTCTGGGTAGGCGCAAGGCGGCAGAGCTGTACAAGATGAATATTCAGGGCGGGG  
 AATAATAACCTGGGGCTGCTACCTGGTCCCTACCATCGTGGGAGGCCAGAGAAAATCTATCGTCTA  
 TTAACACAGCTTTTGGTCTCGTGACCTGACTGCTCACAGCTCTTGTCTGCCCTTGTCTTGGGTG  
 GGAGCCTGGGCTGCGACCCGAGCCACCTGTGAGTTCCTTACCTGCATTATGATGCCACTCTGCCCTT  
 CCACTGCAGTCCATCCTGGCTACAGCCCTGGACACAGTCACTGTTCTTATCGCTGTGTTCTCTCCA  
 GTTCCATGGTTCATCTGGCTGACATGCTGAGCTTCTGTGGGAAAAGGTGGTACAGCAGGAGCAATCA  
 TCCCTTTCCCTTGGCTCCAGGCCAGTCCCTTCTGATTCCTGATGCAGTTTGGAGGAGCCACCCCATG  
 GACCCCACTGTCTGCATGTGGGAGCCTTCTGGAACACGTTGCTTTGCCAGTCACTGGTGTCTGAGGGT  
 ATAGACAGAGCATGCCACACAAGCCAGCTCACCCAGGGACACCTCCACCCTCTGCCCTTATGCATGTA  
 CCACTGGGAAGAAATCTTGGCTCAGTATTTACAACAGCAGCAGCCTGGAGTCAAGATTCTTCCATCT  
 GCTGCTGACTCCCTGCAGGGTGGCTCCTCCTTACCCACCTTCTCAAGCTGCAGTCCACCGGTATG  
 GTTCTGGATGGTCCCCAAGGGAGCAGTGGAGAGCATCCAGTGTGGGGCACTGTGTTCTCTTCGT  
 CCCTGCACCAGACCTGGAAGCCTTGGCCAGAGACCTCACAACTCGACTTGGCGCGTGGCCAGCTT  
 CATGGATGCTGGAGTGGAGCACGATGACGTAGCAGAGCTGCTGCAGGAGCTACAAAGCTGGCCAGTGC  
 TACCAGGGTGGTACAGCCTCGTGGAC

**ACGCGT**ACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC234456 representing NM\_001256532  
 Red=Cloning site Green=Tags(s)

MAGGAREVLTQLGHFAGFVGAHWNQDAALGRATDSKEPPGELCPDVL YRTGRTLHGQETYTPRLILM  
 DLKGSLSLKEEGGLYRDKQLDAAIAWQGLTTHKEELYPKNPYLQDFLSAEGVLSDDGVWRVKSIPNGK  
 GSSPLPTATTPKPLIPTEASIRVWDFLRVHLHPRICMIQKYNHDGEAGRLEAFQGGSVLKEPKYQEE  
 LEDRLFHYVEECDYLQGFQILCDLHDGFSVGVAKAAELLQDEYSGRGIIITWGLLPGPYHRGEAQRNIYRL  
 LNTAFGLVHLTAHSSLVCPLSLGGSLGLRPEPPVSFPYLHYDATLPFHCSAILATALDVTVPYRLCSSP  
 VSMVHLADMLSFCGKKVVTAGAIIPFPLAPGQSLPDSLMQFGGATPWTPLSACGEPSTRCFAQSVVLRG  
 IDRACHTSQLTPGTPPPSALHACTTGEEILAQYLQQQPVMSSHLLLTPCRVPAPPYPHLFSSCSPPGM  
 VLDGSPKGAVESIPVFGALCSSSLHQTLEALARDLTKLTLRRWASFMDAGVEHDDVAELLQELQSLAQ  
 YQGGDSLVD

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001256532

**ORF Size:** 1707 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\\_001256532.1](#), [NP\\_001243461.1](#)

**RefSeq Size:** 2497 bp

**RefSeq ORF:** 1710 bp

**Locus ID:** 55154

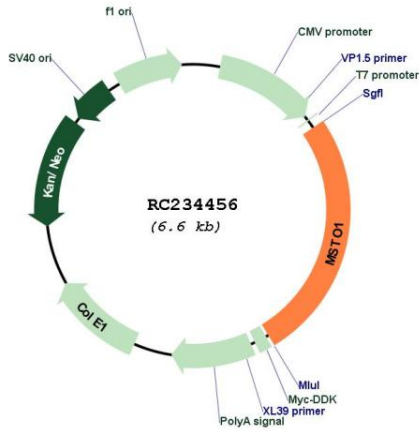
**UniProt ID:** [Q9BUK6](#)

**Cytogenetics:** 1q22

**MW:** 62.2 kDa

**Gene Summary:** Involved in the regulation of mitochondrial distribution and morphology (PubMed:17349998, PubMed:28554942, PubMed:28544275). Required for mitochondrial fusion and mitochondrial network formation (PubMed:28554942, PubMed:28544275).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for RC234456