

## Product datasheet for **RC234429**

### **MSTO1 (NM\_001256533) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MSTO1 (NM_001256533) 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)



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**ORF Nucleotide Sequence:**

>RC234429 representing NM\_001256533  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCGGGCGGGCCCGGGAGGTGCTCACACTGCAGTTGGGACATTTGCCGGTTTCGTGGCGCGCACT  
 GGTGGAACCAGCAGGATGCTGCGCTGGGCCGAGCGACCGATTCCAAGGAGCCCCGGGAGAGCTGTGCC  
 CGACGTCCTGTATCGTACGGGCCGACGCTGCACGGCCAGGAGACCTACACGCCCGACTCATCCTCATG  
 GATCTGAAGGGTAGTTTGTAGCTCCCTAAAAGAGGAAGGTGGACTTACAGGGACAAAAGTTGGATGCTG  
 CAATAGCATGGCAGGGGAAGCTCACCACACAAAAGGAACTCTATCCAAGAACCCTTATCTCCAAGA  
 CTTTCTGAGTGCAGAGGGAGTGTGAGTGTGTTGCTGGAGGGTCAAATCCATTCCAATGGCAA  
 GGTTCTCACCCTCCACCGTACAACCTCAAAACCCTTATCCCTACAGAGGCCAGCATCAGGGTCT  
 GGTGAGACTTCTCAGAGTCCATCTCCATCCCCGGAGCATCTGTATGATTAGAAGTACAACCACGATGG  
 GGAAGCAGGTGCGCTGGAGGCTTTTGGCCAAGGGGAAAGTGTCTAAAGGAACCCAAGTACCAGGAAGAG  
 CTGGAGGACAGGCTGCATTTCTACGTGGAGGAATGTGACTACTTGCAGGGCTTCCAGATCCTGTGTGACC  
 TGCACGATGGCTTCTCTGGGGTAGGCGCAAGGCGGCAGAGCTGTACAAGATGAATATTCAGGGCGGGG  
 AATAATAACCTGGGGCTGCTACCTGGTCCCTACCATCGTGGGGAGGCCAGAGAAAATCTATCGTCTA  
 TTAACACAGCTTTTGGTCTCGTGCACCTGACTGCTCACAGCTCTTGTCTGCCCTTGTCTTGGGTG  
 GGAGCCTGGGCTGCGACCCGAGCCACCTGTGAGTTCCTTACCTGCATTATGATGCCACTCTGCCCTT  
 CCACTGCAGTCCATCCTGGCTACAGCCCTGGACACAGTCACTGTTCTTATCGCTGTGTTCTCTCCA  
 GTTCCATGGTTCATCTGGCTGACATGCTGAGCTTCTGTGGGAAAAGGTGGTACAGCAGGAGCAATCA  
 TCCCTTTCCCTTGGCTCCAGGCCAGTCCCTTCTGATTCCTGATGCAGTTTGGAGGACCCACCCATG  
 GACCCCACTGTCTGCATGTGGGGAGCCTTCTGGAACACGTTGCTTTGCCAGTCAAGTGGTGGTGGGGT  
 ATAGACAGAGCATGCCACACAAGCCAGCTCACCCAGGGACACCTCCACCCTCTGCCCTTATGCATGTA  
 CCACTGGGAAGAAATCTTGGCTCAGTATTTACAACAGCAGCAGCCTGGAGTCAAGATCTTCCCATCT  
 GCTGCTGACTCCCTGCAGGGTGGCTCCTCCTTACCCACCTTCTCAAGCTGCAGTCCACCGGTGGAG  
 AGCATCCAGTGTGGGGCACTGTGTTCTTCTGCTCCCTGCACCAGACCCTGGAAGCCTTGGCCAGAG  
 ACCTCACAAACTCGACTTGGCGCTGGGCCAGCTTCAAGATGCTGGAGTGGAGCAGCATGACGTAGC  
 AGAGCTGCTGAGGAGCTACAAAGCCTGGCCAGTGTACCAGGGTGGTACAGCCTCGTGGAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC234429 representing NM\_001256533  
 Red=Cloning site Green=Tags(s)

MAGGAREVLTQLGHFAGFVGAHWNQDAALGRATDSKEPPGELCPDVLRYRTGRTLHGQETYPRLILM  
 DLKGSLSLKEEGLYRDKQLDAAIAWQKLTTHKEELYKPNPYLQDFLSAEGVLSDDGVWRVKSIPNGK  
 GSSPLPTATPKPLIPTEASIRVWSDFLRVHLHPRICMIQKYNHDGEAGRLEAFQGGSVLKEPKYQEE  
 LEDRLHFYVEECDYLQGFQILCDLHDGFSVGAKAAELLQDEYSGRGIITWGLLPGYHRGEAQRNIYRL  
 LNTAFGLVHLTAHSSLVCPLSLGGSLGLRPEPPVSFPYLHYDATLPFHCSAILATALDVTVPYRLCSSP  
 VSMVHLADMLSFCGKKVVTAGAIIPFPLAPQSLPDSLMQFGGATPWTPLSACGEPGTRCFQAQSVVLRG  
 IDRACHTSQLTPGTPPPSALHACTTGEEILAQYLQQQPVMSSSHLLLTPCRVAPPYPHLFSSCSPPVE  
 SIPVFGALCSSSLHQTLLEALARDLTKLDLRRWASFMDAGVEHDDVAELLQELQSLAQCYQGGDSLVD

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001256533

**ORF Size:** 1674 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\\_001256533.1](#), [NP\\_001243462.1](#)

**RefSeq Size:** 2464 bp

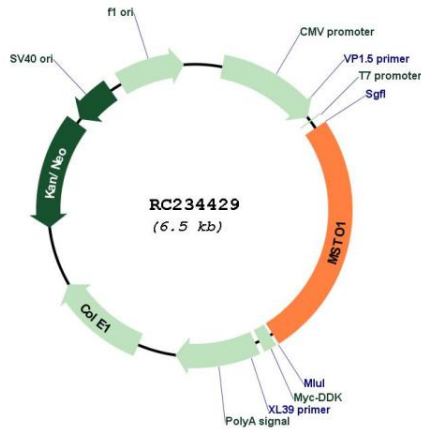
**RefSeq ORF:** 1677 bp

**Locus ID:** 55154

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

**Cytogenetics:** 1q22  
**MW:** 61.2 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 RC234429