

## Product datasheet for **RC200136**

### **MSTO1 (NM\_018116) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MSTO1 (NM_018116) 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:**

>RC200136 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGGGCGGGGCCCGGGAGGTGCTCACACTGCAGTTGGACATTTTCCGGTTTCGTGGCGCGCACT  
 GGTGGAACCAGCAGGATGCTGCGCTGGCCGAGCGACCGATTCCAAGGAGCCCCGGGAGAGCTGTGCC  
 CGACGTCCTGTATCGTACGGGCCGACGCTGCACGGCCAGGAGACCTACACGCCCGGACTCATCCTCATG  
 GATCTGAAGGGTAGTTTGTAGCTCCCTAAAAGAGGAAGGTGGACTTACAGGGACAAAAGTTGGATGCTG  
 CAATAGCATGGCAGGGGAAGCTCACCACACAAAAGGAACTCTATCCAAGAACCCTTATCTCCAAGA  
 CTTTCTGAGTGCAGAGGGAGTGTGAGTGTGTTGCTGGAGGGTCAAATCCATTCCAATGGCAA  
 GGTTCCTCACCCTCCACCGCTACAACCTCAAAACCCTTATCCCTACAGAGGCCAGCATCAGGGTCT  
 GGTGAGACTTCTCAGAGTCCATCTCCATCCCCGGAGCATCTGTATGATTGAGAAGTACAACCACGATGG  
 GGAAGCAGGTGCGCTGGAGGCTTTTGGCCAAGGGGAAAGTGTCTAAAGGAACCCAAGTACCAGGAAGAG  
 CTGGAGGACAGGCTGCATTTCTACGTGGAGGAATGTGACTACTTGCAGGGCTTCCAGATCCTGTGTGACC  
 TGCACGATGGCTTCTCTGGGGTAGGCGCGAAGCGGCAGAGCTGTACAAGATGAATATTCAGGGCGGGG  
 AATAATAACCTGGGGCCTGCTACCTGGTCCCTACCATCGTGGGGAGGCCAGAGAAAATCTATCGTCTA  
 TTAACACAGCTTTTGGTCTCGTGCACCTGACTGCTCACAGCTCTTGTCTGCCCTTGTCTTGGGTG  
 GGAGCCTGGGCCTGCGACCCGAGCCACCTGTGAGTTCCTTACCTGCATTATGATGCCACTCTGCCCTT  
 CCACTGCAGTCCATCCTGGCTACAGCCCTGGACACAGTCACTGTTCTTATCGCTGTGTTCTCTCCA  
 GTTCCATGGTTCATCTGGCTGACATGCTGAGCTTCTGTGGGAAAAGGTGGTACAGCAGGAGCAATCA  
 TCCCTTTCCCTTGGCTCCAGGCCAGTCCCTTCTGATTCCTGATGCAGTTTGGAGGAGCCACCCCATG  
 GACCCCACTGTCTGCATGTGGGGAGCCTTCTGGAACACGTTGCTTTGCCAGTCAAGTGGTCTGAGGGGT  
 ATAGACAGAGCATGCCACACAAGCCAGCTCACCCAGGGACACCTCCACCCTCTGCCCTTATGCATGTA  
 CCACTGGGGAAGAAATCTTGGCTCAGTATTTACAACAGCAGCAGCCTGGAGTCAAGATTCTTCCATCT  
 GCTGCTGACTCCCTGCAGGGTGGCTCCTCCTTACCCACCTTCTCAAGCTGCAGTCCACCGGGTATG  
 GTTCTGGATGGTCCCCAAGGGAGCAGCAGTGGAGAGCATCCCAGTGTGGGGCACTGTGTTCTCTT  
 CGTCCCTGCACCAGACCTGGAAGCCTTGGCCAGAGACCTACCAAACTCGACTTGGCGCGCTGGCCAG  
 CTTTATGGATGCTGGAGTGGAGCAGATGACGTAGCAGAGCTGCTGCAGGAGCTACAAGCCTGGCCAG  
 TGCTACCAGGGTGGTACAGCCTCGTGGAC

**ACGCGT**ACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC200136 protein sequence  
 Red=Cloning site Green=Tags(s)

MAGGAREVLTQLGHFAGFVGAHWNQDAALGRATDSKEPPGELCPDVL YRTGRTLHGQETYTPRLILM  
 DLKGSLSLKEEGGLYRDKQLDAAIAWQGLTTHKEELYPKNPYLQDFLSAEGVLSDDGVWRVKSIPNGK  
 GSSPLPTATTPKPLIPTEASIRVWSDFLRVHLHPRICMIQKYNHDGEAGRLEAFQGGSVLKEPKYQEE  
 LEDRLFYVEECDYLQGFQILCDLHDGFSVVGAKAAELLQDEYSGRGIITWGLLPGPYHRGEAQRNIYRL  
 LNTAFGLVHLTAHSSLVCPLSLGGSLGLRPEPPVSFPYLHYDATLPFHCSAILATALDVTVPYRLCSSP  
 VSMVHLADMLSFCGKKVVTAGAIIPFPLAPGQSLPDSLMQFGGATPWTPLSACGEPSTRCFAQSVVLRG  
 IDRACHTSQLTPGTPPPSALHACTTGEEILAQYLQQQPVMSSSHLLLTPCRVAPPYPHLFSSCSPPGM  
 VLDGSPKGAAVESIPVFGALCSSSLHQTLEALARDLTKLDLRRWASFMDAGVEHDDVAELLQELQSLAQ  
 CYQGGDSLVD

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6277\\_a10.zip](https://cdn.origene.com/chromatograms/mk6277_a10.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_018116

**ORF Size:** 1710 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

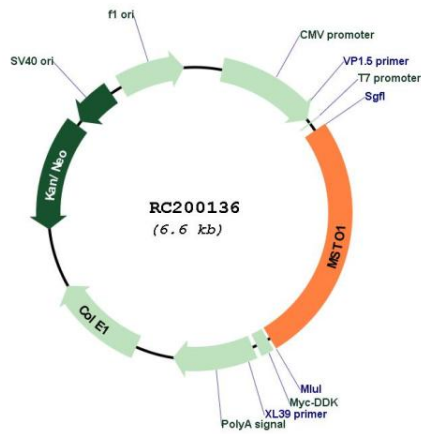
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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.

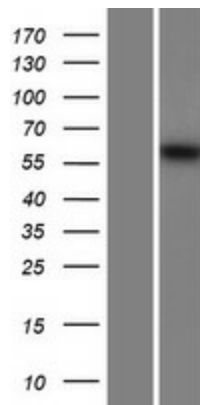
RefSeq: [NM\\_018116.4](#)  
 RefSeq Size: 2500 bp  
 RefSeq ORF: 1713 bp  
 Locus ID: 55154  
 UniProt ID: [Q9BUK6](#)  
 Cytogenetics: 1q22  
 MW: 61.8 kDa

**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 RC200136



Western blot validation of overexpression lysate (Cat# [LY413303]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200136 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).