

Product datasheet for **RG200136**

MSTO1 (NM_018116) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MSTO1 (NM_018116) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MSTO1
Synonyms:	LST005; MMYAT; MST
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG200136 representing NM_018116
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGGGCGGGCCCGGGAGGTGCTCACACTGCAGTTGGGACATTTGCCGGTTTCGTGGCGCGCACT
 GGTGGAACCAGCAGGATGCTGCGCTGGCCGAGCGACCGATTCCAAGGAGCCCCGGGAGAGCTGTGCC
 CGACGTCCTGTATCGTACGGGCCGACGCTGCACGGCCAGGAGACCTACACGCCCGACTCATCCTCATG
 GATCTGAAGGGTAGTTTGTAGCTCCCTAAAAGAGGAAGGTGGACTTACAGGGACAAAAGTTGGATGCTG
 CAATAGCATGGCAGGGGAAGCTCACCACACAAAAGGAAGTCTATCCCAAGAACCCTTATCTCCAAGA
 CTTTCTGAGTGCAGAGGGAGTGTGAGTGTGTTGCTGGAGGGTCAAATCCATTCCCAATGGCAAA
 GGTTCCTCACCCTCCCAACCGTACAACCTCAAAACCACTTATCCCTACAGAGGCCAGCATCAGGGTCT
 GGTGAGACTTCTCAGAGTCCATCTCCATCCCCGGAGCATCTGTATGATTGAGAAGTACAACCACGATGG
 GGAAGCAGGTGCGCTGGAGGCTTTTGGCCAAGGGGAAAGTGTCTAAAGGAACCAAGTACCAGGAAGAG
 CTGGAGGACAGGCTGCATTTCTACGTGGAGGAATGTGACTACTTGCAGGGCTTCCAGATCCTGTGTGACC
 TGCACGATGGCTTCTCTGGGGTAGGCGCGAAGGCGGCAGAGCTGTACAAGATGAATATTCAGGGCGGGG
 AATAATAACCTGGGGCTGCTACCTGGTCCCTACCATCGTGGGGAGGCCAGAGAAAATCTATCGTCTA
 TTAACACAGCTTTTGGTCTCGTGCACCTGACTGCTCACAGCTCTTGTCTGCCCTTGTCTTGGGTG
 GGAGCCTGGGCTGCGACCCGAGCCACCTGTGAGTTCCTTACCTGCATTATGATGCCACTCTGCCCTT
 CCACTGCAGTCCATCCTGGCTACAGCCCTGGACACAGTCACTGTTCTTATCGCTGTGTTCTCTCCA
 GTTCCATGGTTCATCTGGCTGACATGCTGAGCTTCTGTGGGAAAAGGTGGTACAGCAGGAGCAATCA
 TCCCTTTCCCTTGGCTCCAGGCCAGTCCCTTCTGATTCCCTGATGCAGTTTGGAGGAGCCACCCCATG
 GACCCCACTGTCTGCATGTGGGGAGCCTTCTGGAACACGTTGCTTTGCCAGTCAGTGGTGTGAGGGGT
 ATAGACAGAGCATGCCACACAAGCCAGCTCACCCAGGGACACCTCCACCCTCTGCCCTTATGCATGTA
 CCACTGGGGAAGAAATCTTGGCTCAGTATTTACAACAGCAGCAGCCTGGAGTCATGAGTCTTCCCATCT
 GCTGCTGACTCCCTGCAGGGTGGCTCCTCCTTACCCCACTCTTCTCAAGCTGCAGTCCACCGGTATG
 GTTCTGGATGGTTCCTCAAGGGAGCAGCAGTGGAGAGCATCCCAGTGTGGGGCACTGTGTTCTCTT
 CGTCCCTGCACCAGACCTGGAAGCCTTGGCCAGAGACCTCACAAACTCGACTTGGCGCGCTGGCCAG
 CTTTATGATGCTGGAGTGGAGCAGATGACGTAGCAGAGCTGCTGCAGGAGCTACAAGCTGGCCAG
 TGCTACCAGGGTGGTACAGCCTCGTGGAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG200136 representing NM_018116
 Red=Cloning site Green=Tags(s)

MAGGAREVLTQLGHFAGFVGAHWWNQDAALGRATDSKEPPGELCPDVLRYRTGRTLHGQETYTPRLILM
 DLKGSLSLKEEGLYRDKQLDAAIAWQKLTTHKEELYPKNPYLQDFLSAEGVLSDDGVWRVKSIPNGK
 GSSPLPTATPKPLIPTEASIRVWSDFLRVHLHPRICMIQKYNHDGEAGRLEAFQGGSVLKEPKYQEE
 LEDRLHFYVEECDYLQGFQILCDLHDGFSVGAKAAELLQDEYSGRGIITWGLLPGPYHRGEAQRNIYRL
 LNTAFGLVHLTAHSSLVCPLSLGGSLGLRPEPPVSFPYLHYDATLPFHCSAILATALDVTVPYRLCSSP
 VSMVHLADMLSFCGKKVVTAGAIIPFPLAPQSLPDSLMQFGGATPWTPLSACGEPGTRCFQAQSVVLRG
 IDRACHTSQLTPGTPPPSALHACTTGEEILAQYLQQQPVMSSSHLLLTPCRVAPPYPHLFSSCSPPGM
 VLDGSPKGAAVESIPVFGALCSSSLHQTLEALARDLTKLDLRRWASFMDAGVEHDDVAELLQELQSLAQ
 CYQGGDSLVD

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

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 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: 2446 bp

RefSeq ORF: 1713 bp

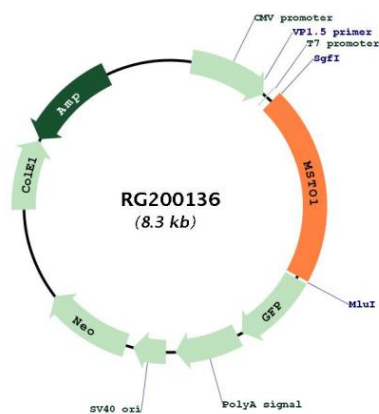
Locus ID: 55154

UniProt ID: [Q9BUK6](#)

Cytogenetics: 1q22

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 RG200136