

Product datasheet for **RG234456**

MSTO1 (NM_001256532) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MSTO1 (NM_001256532) 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:

>RG234456 representing NM_001256532
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGGGCGGGCCCGGGAGGTGCTCACACTGCAGTTGGGACATTTGCCGGTTTCGTGGCGCGCACT
 GGTGGAACCAGCAGGATGCTGCGCTGGCCGAGCGACCGATTCCAAGGAGCCCCGGGAGAGCTGTGCC
 CGACGTCCTGTATCGTACGGGCCGACGCTGCACGGCCAGGAGACCTACACGCCCGACTCATCCTCATG
 GATCTGAAGGTAGTTTGTAGCTCCCTAAAAGAGGAAGGTGGACTTACAGGGACAAAAGTTGGATGCTG
 CAATAGCATGGCAGGGGAAGCTCACCACACAAAAGGAAGTCTATCCCAAGAACCCTTATCTCCAAGA
 CTTTCTGAGTGCAGAGGGAGTGTGAGTGTGTTGCTGGAGGGTCAAATCCATTCCCAATGGCAA
 GGTTCCTCACCCTCCCAACCGTACAACCTCAAAACCCTTATCCCTACAGAGGCCAGCATCAGGGTCT
 GGTGAGACTTCTCAGAGTCCATCTCCATCCCCGGAGCATCTGTATGATTGAGAAGTACAACCACGATGG
 GGAAGCAGGTGCGCTGGAGGCTTTGGCCAAGGGGAAAGTGTCTAAAGGAACCAAGTACCAGGAAGAG
 CTGGAGGACAGGCTGCATTTCTACGTGGAGGAATGTGACTACTTGCAGGGCTTCCAGATCCTGTGTGACC
 TGCACGATGGCTTCTCTGGGGTAGGCGCGAAGCGGCAGAGCTGTACAAGATGAATATTCAGGGCGGGG
 AATAATAACCTGGGGCCTGCTACCTGGTCCCTACCATCGTGGGGAGGCCAGAGAAAATCTATCGTCTA
 TTAACACAGCTTTTGGTCTCGTGCACCTGACTGCTCACAGCTCTTGTCTGCCCTTGTCTTGGGTG
 GGAGCCTGGGCCTGCGACCCGAGCCACCTGTGAGTTCCTTACCTGCATTATGATGCCACTCTGCCCTT
 CCACTGCAGTCCATCCTGGCTACAGCCCTGGACACAGTCACTGTTCTTATCGCTGTGTTCTCTCCA
 GTTCCATGGTTCATCTGGCTGACATGCTGAGCTTCTGTGGGAAAAGGTGGTACAGCAGGAGCAATCA
 TCCCTTTCCCTTGGCTCCAGGCCAGTCCCTTCTGATTCCCTGATGCAGTTTGGAGGACCCCATG
 GACCCCACTGTCTGCATGTGGGGAGCCTTCTGGAACACGTTGCTTTGCCAGTCAGTGGTCTGAGGGGT
 ATAGACAGAGCATGCCACACAAGCCAGCTCACCCAGGGACACCTCCACCCTCTGCCCTTATGCATGTA
 CCACTGGGAAGAAATCTTGGCTCAGTATTTACAACAGCAGCAGCCTGGAGTCATGAGTCTTCCCATCT
 GCTGCTGACTCCCTGCAGGGTGGCTCCTCCTTACCCCACTCTTCTCAAGCTGCAGTCCACCGGTATG
 GTTCTGGATGGTCCCCAAGGGAGCAGTGGAGAGCATCCAGTGTGGGGCACTGTGTTCTCTTCGT
 CCCTGCACCAGACCTGGAAGCCTTGGCCAGAGACCTCACAACTCGACTTGGCGCGTGGCCAGCTT
 CATGGATGCTGGAGTGGAGCACGATGACGTAGCAGAGCTGCTGCAGGAGCTACAAAGCCTGGCCAGTGC
 TACCAGGGTGGTACAGCCTCGTGGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG234456 representing NM_001256532
 Red=Cloning site Green=Tags(s)

MAGGAREVLTQLGHFAGFVGAHWWNQDAALGRATDSKEPPGELCPDVLRYRTGRTLHGQETYTPRLILM
 DLKGSLSLKEEGLYRDKQLDAAIAWQKLTTHKEELYPKNPYLQDFLSAEGVLSDDGVWRVKSIPNGK
 GSSPLPTATPKPLIPTEASIRVWSDFLRVHLHPRSIQKYNHDGEAGRLEAFQGGSVLKEPKYQEE
 LEDRLFHYVEECDYLQGFQILCDLHDGFSVGAKAAELLQDEYSGRGIITWGLLPGPYHRGEAQRNIYRL
 LNTAFGLVHLTAHSSLVCPLSLGGSLGLRPEPPVSFPYLHYDATLPFHCSAILATALDVTVPYRLCSSP
 VSMVHLADMLSFCGKKVVTAGAIIPFPLAPQSLPDSLMQFGGATPWTPLSACGEPGTRCFQAQSVVLRG
 IDRACHTSQLTPGTPPPSALHACTTGEEILAQYLQQQPVMSSSHLLLTPCRVAPPYPHLFSSCSPPGM
 VLDGSPKGAVESIPVFGALCSSSSLHQTLEALARDLTKLDLRRWASFMDAGVEHDDVAELLQELQSLAQ
 YQGGDSLVD

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

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

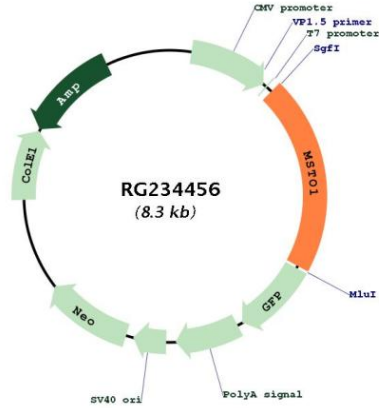
UniProt ID: [Q9BUK6](#)

Cytogenetics: 1q22

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 RG234456