

Product datasheet for MC223256

Myo1g (NM_178440) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Myo1g (NM_178440) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Myo1g
Synonyms:	E430002D17Rik
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC223256 representing NM_178440 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTTGCAGTGGGCAGGATGGAGGACGAAGAAGGCCCTGAGTATGGGAAACCAGACTTCGTGCTTTTGG
ATCAACTGACCATGGAGGACTTCATGAAGAACCTAGAGCTCAGGTTTGAGAAGGGCCGTATCTATACCTA
CATTGGTGAGGTGCTCGTATCCGTGAACCCCTACCAGGAACTGCCATTGTATGGGCCAGAGGCCATTGCC
AAGTACCAGGGCCGCGAGCTCTATGAGCGACCCTCATCTTTACGCCGTGGCCAATGCTGCTTACAAGG
CAATGAAGCGCAGATCCAGGGACACCTGCATCGTCATCTCAGGGGAGAGTGGGGCAGGGAAGACAGAAGC
CAGCAAGCACATCATGCAGTACATTGCTGCTGTACCAACCCAAGCCAGAGGGCTGAGGTGGAGAGGGTG
AAGAAATGTGCTCCTCAAGTCCACCTGTGTGCTCGAAGCCTTTGGCAATGCCCGCACCAATCGCAACCACA
ACTCCAGCCGCTTTGGCAAGTACATGGACATCAACTTCGACTTCAAGGGGGATCCTGTTGGTGGACACAT
CCACAGTACCTGCTGGAGAAGTCTAGGTTCTCAAGCAACATGTAGGTGAGAGGAACTCCATGCCTTC
TACCAGTTGCTTCGAGGCAGTGAGGACCAAGAGCTGCAAGGACTGCATCTGGAAGAAAATCCTGCTGTGT
ATAATTTACGCGTCAGGGAGCTGGGCTCAACATGGGTGTGCACAATGCCTTGGACAGTGAAGAGAG
CCACCAAGGAGTGATGGAGGCCATGAGGATCATCGGCTTCAGTCTGACGAGGTGGAGTCCATCCATCGC
ATCCTTGCCGCCATATTACACCTGGGAAACATCGAGTTTGTGGAGACAGAGGAAAATGGACCACAGAAAAG
GAGGCCTGGAAGTGGCTGATGAGGCCCTGGTAGGATATGTGGCCAAGCTGACAGCCACTCCCAGAGACCT
TGTTCTGCAACCCTGCTGGCTCGAACAGTGGCTTCAGGAGGCCGAGAAGTCAATTGAGAAGAGCCACACC
GTGGCTGAGGCCAGCTATGCCCGGATGCCTGTGCAAAGGCGATGTACCAGCGACTGTTTGAGTGGGTTG
TGAACAAGATCAATAGCATCATGGAACCCGAAACCGAGACCCTCGGTGTGATGGCAAGGATACTGTCAT
TGGGGTCTGGACATTTACGGCTTTGAGGTGTTCCCTGTCAACAGCTTTGAGCAGTTCTGCATCAACTAC
TGCAACGAGAAGCTGCAGCAGCTTTTATCCAGCTTATCCTGAAGCAAGAGCAGGAGGAGTATGAGCGAG
AGGGCATTGCCTGGCAGACCATCGAGTACTTCAACAACGCTACCATTGTGGAACCTGTAGAGCAGCCCA
CAGAGGCATCCTGGCTGTGTTAGATGAAGCCTGCAGCACGGCAGGCCCATCACTGACCGAATCTTCCTG
CAGACCCTGGACACACACCACCGCCACCACCACTATTCCAGCCGCCAGCTTTGCCCTACGGACAAGA



CCATGGAGTTTGGCCGAGACTTCCAGATCAAACACTATGCAGGCGATGTCACGTA CTCTGTGGAAGGCTT
 CATTGACAAGAATAGAGACTCTCTCTCCAGGACTTCAAACGGCTGCTGTACAATAGTGTGGATCCCACC
 TTGCGAGCCATGTGGCCTGACGGGCAACAGGACATCACGGAAGTGACCAAGCGTCCCCTGACAGCCGGCA
 CACTCTTTAAGAAATCCATGGTTGCCCTGGTGGAAAATTGGCTTCCAAGGAACCTTCTATGTCGGCTG
 CATCAAACCAACGAAGACAAGGTGGCTGGGCGGCTCGATGAAGCCACTGTCGTACCAGGTCGAATAC
 CTGGGACTATTGGAGAATGTGAGGGTCCGACGGGCTGGCTTTGCTTCCCGGACGCCCTACCCTCGATTCC
 TGCTCAGGTACAAGATGACCTGTGAGTACACGTGGCCCAACCACCTGCTGGGCTCTGACCGGGATGCGGT
 GAGCGCCTGCTGGAACAGCATGGGCTGCAAGGGGATGTGGCCTTTGGCCACAGCAAGCTGTTCATCCGA
 TCCCAAGGACGCTGGTCACTCTGGAGCAGAGCCGAGCTCGCCTGATTCCCATCATTGTGTTATTGCTGC
 AGAAGGCTTGGCGGGGCACCCTGGTAGGTGGCACTGCCGGGACTAAGGGCCATCTACACCATCATGCG
 CTGTTCCGGAGGCACAAGGTGCGTGCTCACCTGATTGAACTACAGCGCCGGTTCAGGCTGCACGGCAG
 CCCCCACTCTATGGCCGTGACCTTGTGTGGCCACACCTCCTGCTGTGCTGCAGCCCTTCCAGGACTT
 GCCGTGTTCTCTCAGCAGGTGGCGGGCAGGCAGTTAGTGAAGAATCCCTCCTTCCAGCATGATCCA
 GATCAAGGCCAAGGTGGCTGCTATGGGGCCTTGAAGGATTGCGGCAGGACTGGGGTTGCCAGCGGGCC
 TGGGCCGAGACTACCTGTCCTCTGACTGACAACCCACAGCTTCCCATCTGTTTGTGAGCAACTAA
 AGGCACCTCGGGAGAAAGATGGCTTTGGCTCTGTGCTTTCTCCAGCCATGTGCCAAGGTGAATCGCTT
 CCGCAAGAGCCGGGACCGGGCCCTTCTGCTCACAGATCGGTATCTGTACAAGCTGGAGCCTGGACGACAG
 TACCGGGTGATGCGGGCTGTGCCTCTGGAGCGGTGACAGGGCTGAGTGTGACCAGTGAAGAGATCAGC
 TGGTGGTGTTACATGCCCAAGGCTATGATGATCTTGTAGTGTCTACACCGTTCCTCAACCACCACTGGA
 CAATCGAATTGGGGAGCTGGTGGGCATGCTGGCTGCACACTGCCAGGGAGAGGGACGAACCTGAGGTC
 CGTGTCTCTGACTGCATCCCCTGAGCCAGCGTGGTCCCGGCGCCTCATTTCTGTGGAGCCAGGCCAG
 AGCAGCCTGAGCCAGATTTCAAAGCAGCCGTAGCACCTTTACCCTCCTCTGGCCAAGCCACTGA

AGCGGACCGACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

SgfI-RsrII

ACCN:

NM_178440

Insert Size:

3075 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_178440.4](#), [NP_848534.2](#)

RefSeq Size:

3307 bp

RefSeq ORF:

3075 bp

Locus ID: 246177

UniProt ID: [Q5SUA5](#)

Cytogenetics: 11 A1

Gene Summary: Unconventional myosin required during immune response for detection of rare antigen-presenting cells by regulating T-cell migration (PubMed:25083865). Unconventional myosins are actin-based motor molecules with ATPase activity and serve in intracellular movements. Acts as a regulator of T-cell migration by generating membrane tension, enforcing cell-intrinsic meandering search, thereby enhancing detection of rare antigens during lymph-node surveillance, enabling pathogen eradication (PubMed:25083865). Also required in B-cells, where it regulates different membrane/cytoskeleton-dependent processes (PubMed:24310084). Involved in Fc-gamma receptor (Fc-gamma-R) phagocytosis (PubMed:23038771).[UniProtKB/Swiss-Prot Function]