

Product datasheet for **MC229652**

Myo18a (NM_001291214) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Myo18a (NM_001291214) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Myo18a
Synonyms:	MAJN; MyoPDZ; MysPDZ; SP-R210
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC229652 representing NM_001291214 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCTGGCCAAGACGGAAGAGCAGATTGCCGCTGAAGAGGCTGGTATGAGACGGAGAAGGTGTGGCTGG
TCCATAGAGATGGATTCTCCTTAGCCAGCCAGCTCAAGTCTGAGGAGCTCAGCCTACCCGAGGGGAAGGC
GCGTGTGAAGCTGGACCATGACGGAGCCATCCTGGATGTGGATGAAGATGATATAGAGAAGGCTAATGCT
CCTTCATGTGACCGTCTAGAAGATCTGGCCTCACTGGTATACCTCAACGAGTCTAGCGTCCCTGCATACAC
TGCCCCAGCGCTATGGGGCTAGCCTGCTACACACCTATGCTGGCCCCAGCCTGCTTGTCCCTTAGCACCCG
AGGGGCTCCTGTGTATTAGAGAAGGTGATGCACATGTTCAAGGGGTGTGGCGGGAGGACATGGCA
CCCCACATCTACGCTGTAGCCCAGACTGCATATAGGGCGATGTTGATGAGTCGTCAGGACCAGTCCATTG
TCCTTCTGGGTAGTAGTGGCAGTGGCAAGACTACCAGCTTTCAGCATCTGGTGCAGTATCTGGCTACCAT
CGCGGGTACCAGTGGGACCAAGGTGTTCTCAGTGGAGAAGTGGCAGGCTCTGTCCACCCTCCTGGAAGCC
TTTGGGAACAGCCCCACCATCATGAATGGCAGTGCCACCCGCTTCTCCAGATCCTCTCCCTGGATTTG
ACCAAGTGGCCAGGTGGCTTCGGCCTCCATCCAGACAATGCTCCTGGAGAAGCTGCGTGTGGCCCGGG
CCAGCCAGTGGGCTACTTTCAATGTCTTCTACTACTTGGCTGGCCTGTGGGGATGCCACCCTCAGGACA
GAGCTCCACCTGAACCACTTGGCAGAGAACAATGTGTTTGAATTGTGCCACTGTCCAAGCCTGAGGAGA
AGCAGAAGGCTGCACAGCAGTTCAGTAAGTCCAGGCTGCCATGAAGGTGCTGGCCATCTCCCCGAGGA
ACAGAAGACCTGCTGGCTCATCTGGCTTCCATCTACCACCTGGGGGCTGCTGGAGCTACCAAAGCTGGA
CGAAAGCAGTTTGGCCGACGAATGGGCCAGAAAGGCAGCATACCTGCTGGGCTGCAGCTTGAAGAGC
TGTCTCGGCTATCTTCAAACACCAGCTAAAAGGAGGCACCCTGCAACGGTCCACCTCCTCCGTCAGGG
CCCTGAGGAGAGCGCCCTGGGAGAGGGCACCAAAGTGAAGTCTGAGTCTGGAGTCTTAGAGGGTATGGCGTCT
GGCCTCTACAGTGAAGCTTTACTCTCCTCATCTCCCTGGTAAACAGGGCTCTCAAGTCCAGCCAGCACT
CACTCTGTTCCATGATGATCGTGGACACACCAGGCTTCCAGAACCCTGAATGGGGCGGCTCGGCCGTTGG
AGCCTCCTTCGAGGAGCTGTGCCACAACATATGCCAGGACAGGCTGCAGAGGCTGTTCCACGAGCGCACC
TTCTCCAGGAGTTGGAGAGATACAAGGAGGATAACATAGAAGTGGCGTTTGTGACTTGGAGCCAGTTG



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CAGATGACTCCGTGGCTGCTGTGGACCAGGCTTCCCACCTGGTTCGCTCACTGGCCCATGCCGATGAGGC
 AAGAGGGCTACTGTGGCTCCTGGAAGAGGAGGCACTGGTGCCTGGTGCACAGAGGATGCCCTCCTTGAT
 CGTCTTTTCTCCTATTATGGCCCCAGGAGGGTGACAAAAAGGCCAGAGTCCTCTTCTGCGAAGTAGCA
 AACCTCGGCACCTTCTCCTGGGCCACAGCCACGGTACCAACTGGTGGAGTACAACGTGGCTGGCTGGCT
 GAATTACACCAAGCAGAACCAGCCACCCAGAATGCACCCCGGCTTCTGCAGGACTCCCAGAAAAAGATC
 ATCAGTAACCTGTTTCTGGGCCGGGCGGCAGTGCCACGGTGTCTCAGGCTCGATTGCAGGCTGGAAG
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 AAGATGCATTTCTGTCACTGCTTCTTCTGTGGCCGAGGGCTGGCCGGGGAGCCCGGCTGCTCCTT
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 ACTGGATGTGTCCTGCTCCGAGCCAGCTCCGGGGATCCCGCTGCTTGTGCGATGCGCATGTACCGC
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 TTGCCCGCCAGCACTTCAAGAAGAGAAAGATCCAGGACCTGGCCATTGCTGTGTGCAGAAGAACATCAA
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 CAGCTGTGAGAGGAGCAGATCCGAAACAAGACGAGGAGATCCAGCAGCTGCGCAGCAAGCTTGAGAAGG
 TGGAGAAGGAGAGGAACGAGCTCCGACTCAGCAGTGACCGGCTAGAGACCCGGATCTCAGAACTGACATC
 GGAGCTGACTGATGAACGCAACACGGGAGAGTCCGCTCCAGCTGTGGACGCGGAGACAGCCGAGAGG
 CTCCGGACCGAGAAGGAGATGAAAGAGCTACAGACCCAGTATGACGCACTGAAGAAGCAGATGGAGGTGA
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 CAGCAGGAGCTGGAAGACAAGATGGAGGTGGAACAGCAGAGCAGGAGGCACTGGAGAGGCGCTTGGGG
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 AGCTGAGCTGCAGGACACCAAGCTGCACCTGGAGGGCCAGCAGGTCCGAAACCAGAGCTGGAGAAGAAG
 CAGAGGAGGTTGACAGTGTGCTTCCAGGCCACGAGGAGACGAGCGGGAGAAGCTGCAGAGGGAGA
 AACTCCAGCGGGAGAAGGACATGCTCCTGGCTGAGGCTTTCAGCTTGAAGCAGCAATGGAGAAAAAGA
 CTTGGACATTGCGGGGTTTACCCAGAAGGTGGTTTCTTGGAGGCTGAGCTTCAGGACATTTCTTCTCAA
 GAGTCTAAGGATGAGGCTTCTCTGGCAAGGTCAAGAAGCAGCTCCGGGACTTGGAGCCAAAGTCAAGG
 ACCAGGAAGAGGAGCTGGATGAGCAGGCTGGGAGTATACAGATGTGGAGCAGGCCAAGCTGCGTCTGGA
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 GCCCGGCAGTCATGTGAGAAGAAGTAAAAACAGATGGAAGTGCAGCTCGAGGAGGAGTATGAAGACAAGC
 AGAAGGGCTGCGGGGAGAAACGGGAGCTGGAGAGCAAGCTCTCCACGCTCAGTGACCAGGTGAACCAGCG
 GGACTTTGAATCAGAGAAGCGGCTACGGAAGACCTGAAGCGCACCAAGCGCTGCTGGCAGATGCCCAG
 ATCATGCTGGACCACTTAAAGAACAATGCCCGGAGCAAGAGGGAGATTGCCAGCTGAAGAACCAGCTGG
 AAGAGTCGGAATTCACCTGTGCAGCAGCTGTAAGGCACGGAAAGCGATGGAGGTGGAGATGGAAGACCT
 GCACCTGCAGATTGATGACATCGCCAAAGCCAAGACAGCGCTGGAGGAGCAACTGAGTCGACTTCAGCGT
 GAGAAAAACGAGATTCAAAACCGGCTGGAAGAGGATCAGGAGGACATGAATGAGCTGATGAAGAAGCACA
 AGGCAGCTGTGGCCAGGCTCCCGGGACATGGCACAGATGAACGATCTCCAGGCTCAGATTGAAGAGTC
 CAACAAGGAGAAGCAAGAGCTACAGGAGAAGCTACAAGCTCTGCAGAGCCAGGTGGAGTTCCTGGAGCAG
 TCCATGTTGGACAAGTCCCTCGTCAGCAGGCAAGGCAAGATCAGGGAGCTGGAGACACGCTGGAGT
 TCGAAAAGACCAAGTGAAGCGCTGGAGAACCTGGCCAGTCGGCTCAAAGAAACCATGGAGAAGCTGAC
 TGAGGAACGGGACCAGCGCGCCGACGCTGAGAACCCTGAGAAGGAGCAGAACAAGAGGCTCCAGCGACAG
 CTTCTGACACCAAGGAGGAGATGAGCGAGCTTCCAGGAAGGAAGCCGAGGCTAGCCGCAAGAAGCATG
 AACTGGAGATGGACCTGGAGAGCCTGGAAGCTGCTAACCAAGCCTGCAAGCCGACCTAAAGCTGGCGTT
 CAAACGCATTGGGGACTTCAAGCTGCCATTGAGGATGAGATGGAAGTGAAGAGTCCAGCCCAACAGCCA
 AACAGTGAGGGGACTCAGATGTGGACTCAGAGCTGGAGGACCGGTCGACGGGGTCAAGTCTGTTGT
 CAAAGAACAAGGGACCTTCAAGGCACCTTCTGACGATGGCAGCTTGAAGAGTCCAGCCCAACAGCCA
 CTGGAAGCCACTCGCCCTGACCCATCGGATGATGAGCATGATCTGTGGACAGCATCTCCAGACCCCGG
 TTCTCCACAGCTATCTGAGTGACAGCGACACAGAGGCCAAGCTGACAGAGACCAGTGCATAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-Mlul
ACCN:	NM_001291214
Insert Size:	5103 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).
OTI Annotation:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
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:	<ol style="list-style-type: none">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:	<u>NM_001291214.1, NP_001278143.1</u>
RefSeq Size:	6351 bp
RefSeq ORF:	5103 bp
Locus ID:	360013
UniProt ID:	<u>Q9JMH9</u>
Cytogenetics:	11 B5

Gene Summary:

May link Golgi membranes to the cytoskeleton and participate in the tensile force required for vesicle budding from the Golgi. Thereby, may play a role in Golgi membrane trafficking and could indirectly give its flattened shape to the Golgi apparatus (PubMed:19837035). Alternatively, in concert with LURAP1 and CDC42BPA/CDC42BPB, has been involved in modulating lamellar actomyosin retrograde flow that is crucial to cell protrusion and migration (By similarity). May be involved in the maintenance of the stromal cell architectures required for cell to cell contact (PubMed:10733906). Regulates trafficking, expression, and activation of innate immune receptors on macrophages. Plays a role to suppress inflammatory responsiveness of macrophages via a mechanism that modulates CD14 trafficking (PubMed:25965346). Acts as a receptor of surfactant-associated protein A (SFTPA1/SP-A) and plays an important role in internalization and clearance of SFTPA1-opsonized S.aureus by alveolar macrophages (PubMed:21123169). Strongly enhances natural killer cell cytotoxicity (By similarity).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (4) lacks a portion of the 5' coding region, contains an alternate 5'-terminal exon, uses an alternate start codon, and lacks an exon in the central coding region, compared to variant 1. The encoded isoform (4) is shorter and has a distinct N-terminus, compared to isoform 1.