

## Product datasheet for MC229657

### Myo18a (NM\_001291215) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Myo18a (NM_001291215) 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:	>MC229657 representing NM_001291215 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTGCTGGACCCCGAGGCCCTCTCCTGCCTACAGCCAGGCCAAGACGGAAGAGCAGATTGCCGCTG  
AAGAGGCCTGGTATGAGACGGAGAAGGTGTGGCTGGTCCATAGAGATGGATTCTCCTTAGCCAGCCAGCT  
CAAGTCTGAGGAGCTCAGCCTACCCGAGGGGAAGGCGCTGTGAAGCTGGACCATGACGGAGCCATCCTG  
GATGTGGATGAAGATGATATAGAGAAGGCTAATGCTCCTTCATGTGACCGTCTAGAAGATCTGGCCTCAC  
TGGTATACCTCAACGAGTCTAGCGTCTGCATACACTGCCCCAGCGCTATGGGGTAGCCTGCTACACAC  
CTATGCTGGCCCCAGCCTGCTTGTCTTAGCACCCGAGGGCTCCTGCTGTGATTTCAGAGAAGGTGATG  
CACATGTTCAAGGGGTGTCGGCGGGAGGACATGGCACCCACATCTACGCTGTAGCCAGACTGCATATA  
GGGCGATGTTGATGAGTCGTGAGGACAGTCCATTGCTCCTTCTGGGTAGTAGTGGCAGTGGCAAGACTAC  
CAGCTTTCAGCATCTGGTGCAGTATCTGGCTACCATCGCGGTACCAGTGGGACCAAGGTGTTCTCAGTG  
GAGAAGTGGCAGGCTCTGTCCACCCTCTGGAAGCCTTTGGGAACAGCCCCACCATCATGAATGGCAGTG  
CCACCCGCTTCTCCAGATCCTCTCCCTGGACTTTGACCAAGCTGGCCAGGTGGCTTCGGCTCCATCCA  
GACAATGCTCCTGGAGAAGCTGCGTGTGGCCCGCGCCAGCCAGTGAAGGCTACTTTCAATGTCTTCTAC  
TACTTGCTGGCCTGTGGGGATGCCACCCTCAGGACAGAGCTCCACCTGAACCACTTGGCAGAGAACAATG  
TGTTTGAATTGTGCCACTGTCCAAGCCTGAGGAGAAGCAGAAGGCTGCACAGCAGTTTCAGTAAGCTCCA  
GGCTGCCATGAAGGTGCTGGCCATCTCCCCGAGGAACAGAAGACCTGCTGGCTCATCTGGCTTCCATC  
TACCACCTGGGGCTGCTGGAGCTACCAAAGAGCCCTTGAGGAGCAAGACGCTGCTGAAGCTGGACGAA  
AGCAGTTTGGCCGCCACGAATGGGCCCAGAAGGCAGCATACCTGCTGGGCTGCAGCTTGAAGAGCTGTC  
CTCGGCTATCTTCAAACACCAGCTAAAAGGAGGCACCTGCAACGGTCCACCTCCTCCGTCAGGGCCCT  
GAGGAGAGCGGCCTGGGAGAGGGCACAAACTGAGTGCTCTGGAGTGCTTAGAGGGTATGGCGTCTGGCC  
TCTACAGTGAGCTCTTACTCTCCTCATCTCCCTGGTAAACAGGGCTCTCAAGTCCAGCCAGCACTCACT  
CTGTTCCATGATGATCGTGGACACACCAGGCTTCCAGAACCCTGAATGGGGCGGCTCGGCCCGTGGAGCC  
TCCTTCGAGGAGCTGTGCCACAACATATGCCAGGACAGGCTGCAGAGGCTGTTCCACGAGCGCACCTTCC



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TCCAGGAGTTGGAGAGATACAAGGAGGATAACATAGAAGTGGCGTTTGTGACTTGGAGCCAGTTGCAGA  
 TGAATCCGTGGCTGCTGTGGACCAGGCTTCCCACCTGGTTCGCTCACTGGCCCATGCCGATGAGGCAAGA  
 GGGCTACTGTGGCTCCTGGAAGAGGAGGCACTGGTGCCTGGTGCACAGAGGATGCCCTCCTTGATCGTC  
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 TCGGCACTTTCTCCTGGCCACAGCCACGGTACCAACTGGGTGGAGTACAACGTGGCTGGCTGGCTGAAT  
 TACACCAAGCAGAACCAGCCACCCAGAATGCACCCCGGCTTCTGCAGGACTCCCAGAAAAAGATCATCA  
 GTAACCTGTTTCTGGCCGGGCGGGCAGTGCCACGGTGTCTCAGGCTCGATTGCAGGCCGGAAGGTGG  
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 AAGAAGTCGCTGTGCATACAGATTAAGCTGCAAGTAGATGCCCTCATTGATACCATCAAGAGGTCCAAGA  
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 CAGAGTCAGCAGCAGTGTGAGCTGGACCTGCCCCGGGAGACCCTGTGAGGCTGGGCTGCTACAACCTG  
 GATGTGTCCCTGCTCCGAGCCAGCTCCGGGGATCCCGCTGCTTGTGCGATGCGCATGTACCGCCAAG  
 GTTACCCAGACCACATGGTGTCTTCTGAGTTCGCGCGGCTTTGATGTCCTGGCTCCACACCTGACCAA  
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 CCGCCAGCACTTCAAGAAGAGAAAGATCCAGGACCTGGCCATTGCTGTGTGCAGAAGAATCAAGAAG  
 AACAGGGGGTGAAGGACTGGCCCTGGTGAAGCTTTCACCACCGTGGCCCTCATCCAAGTTCAGC  
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 GAAGGAGAGGAACGAGCTCCGACTCAGCAGTACCAGGCTAGAGACCCGGATCTCAGAAGTACATCGGAG  
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 GGACCGAGAAGGAGATGAAAGAGCTACAGACCCAGTATGACGCACTGAAGAAGCAGATGGAGGTGATGGA  
 GATGGAAGTGTGGAAGCCCGGCTCATTCCGGCAGCCAGATCAACGGGGAGGTGGATGATGATGATGCA  
 GGGGAGAGTGGAGGCTGAAGTACGAGCGAGCTGTTCCGGAGGTGGACTTACCAAGAAGCGGCTCCAGC  
 AGGAGCTGGAAGACAAGATGGAGGTGGAACAGCAGAGCAGGAGGCACTGGAGAGCGGCTTGGGACCT  
 GCAAGCAGATAGTGTGAGAGTCAACGGGCACTGCAGCAGCTCAAGAAGAAGTGCCAAAGGCTCACAGCT  
 GAGCTGCAGGACACCAAGCTGCACCTGGAGGGCCAGCAGGTCCGAAACCAGAGCTGGAGAAGAAGCAGA  
 GGAGGTTGACAGTGTGAGCTTCCAGGCCACGAGGAGACGCAGCGGAGAAAGCTGCAGAGGAGAAACT  
 CCAGCGGGAGAAGGACATGCTCCTGGCTGAGGCTTTCAGCTTGAAGCAGCAAATGGAGGAAAAAGACTTG  
 GACATTGCGGGTTTACCAGAAGGTGGTTTCTTGGAGGCTGAGCTTCCAGGACATTTCTTCTCAAGAGT  
 CTAAGGATGAGGCTTCTGTCGCAAGGTCAAGAAGCAGCTCCGGGACTTGGAGGCAAGGTCAAGGACCA  
 GGAAGAGGAGCTGGATGAGCAGGCTGGGAGTATACAGATGCTGGAGCAGGCAAGCTGCGTCTGGAGATG  
 GAGATGGAGAGAATGAGACAGACCCATTCCAAGGAGATGGAGAGTCCGGATGAGGAGGTGGAAGAGGCC  
 GGCAGTCAATGTCAGAAGAAGTAAAAACAGATGGAAGTGCAGCTCGAGGAGGAGTATGAAGACAAGCAGAA  
 GGCGCTGCGGGAGAAACGGGAGCTGGAGAGCAAGCTTCCACGCTCAGTACCAGGTGAACCAGCGGGAC  
 TTTGAATCAGAGAAGCGGCTACGGAAAGACCTGAAGCGCACCAAAAGCGCTGCTGGCAGATGCCAGATCA  
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 GTCGGAATTCACCTGTGCAGCAGCTGTAAGGCCACGAAAGCGATGGAGGTGGAGATGGAAGACCTGCAC  
 AAAACGAGATTCAAACCGGCTGGAAGAGGATCAGGAGGACATGAATGAGCTGATGAAGAAGCACAAGGC  
 AGCTGTGGCCAGGCTCCCGGACATGGCACAGATGAACGATCTCCAGGCTCAGATTGAAGAGTCCAAC  
 AAGGAGAAGCAAGAGCTACAGGAGAAGCTACAAGCTCTGCAGAGCCAGGTGGAGTTCCTGGAGCAGTCCA  
 TGGTGGACAAGTCCCTCGTCAAGCAGGCAAGGAGGAGATCAGGGAGCTGGAGACACGCCTGGAGTTCGA  
 AAAGACCAAGTGAAGCGCTGGAGAACCTGGCCAGTCCGCTCAAAGAAACCATGGAGAAGCTGACTGAG  
 GAACGGGACCAGCGCCGACGCTGAGAACCCTGAGAAGGAGCAGAACAAGAGGCTCCAGCGACAGCTTC  
 GTGACACCAAGGAGGAGATGAGCGAGCTTCCAGGAAGGAAGCCGAGGCTAGCCGCAAGAAGCATGAACT  
 GGAGATGGACCTGGAGAGCCTGGAAGCTGCTAACCAAGCCTGCAAGCCGACCTAAGCTGGCGTTCAA  
 CGCATTGGGGACTTGAAGCTGCCATTGAGGATGAGATGGAAGTACGAGAACGAGGACCTCATCAACA  
 GTGAGGGGGACTCAGATGTGACTCAGAGCTGGAGGACCGGGTCGACGGGGTCAAGTCTGGTTGTCAAA  
 GAACAAGGGACCTTCAAGGCACCTTCTGACGATGGCAGCTTGAAGAGTTCAGCCCAACCAGCCACTGG  
 AAGCCACTCGCCCTGACCCATCGGATGATGAGCATGATCCTGTGGACAGCATCTCCAGACCCCGGTTCT  
 CCCACAGTATCTGAGTGACAGCGACACAGAGGCCAAGCTGACAGAGACCAGTGCATAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

<b>Restriction Sites:</b>	Sgfl-MluI
<b>ACCN:</b>	NM_001291215
<b>Insert Size:</b>	5169 bp
<b>OTI Disclaimer:</b>	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).
<b>OTI Annotation:</b>	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_001291215.1, NP_001278144.1</u>
<b>RefSeq Size:</b>	6417 bp
<b>RefSeq ORF:</b>	5169 bp
<b>Locus ID:</b>	360013
<b>UniProt ID:</b>	<u>Q9JMH9</u>
<b>Cytogenetics:</b>	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 (5) contains an alternate 5'-terminal exon and has multiple coding region differences, compared to variant 1. The encoded isoform (5) is shorter and has a distinct N-terminus, compared to isoform 1.