

## Product datasheet for MR231868

### Myo18a (NM\_001291215) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Myo18a (NM_001291215) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Myo18a
Synonyms:	MAJN; MyoPDZ; MysPDZ; SP-R210
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR231868 representing NM_001291215 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**GCGATCGCC**

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TCCAGGAGTTGGAGAGATACAAGGAGGATAACATAGAAGTGGCGTTTGTGACTTGGAGCCAGTTGCAGATGACTCCGTGGCTGTGTGGACCAGGCTTCCCACCTGGTTCGCTCACTGGCCCATGCCGATGAGGCAAGA  
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR231868 representing NM\_001291215  
Red=Cloning site Green=Tags(s)

MLLDPEAASPAYSQAKTEEQIAAEEAWYETEKVWLVHRDGFSLASQLKSEELSLPEGKARVKLDHDGAIL  
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FESEKRLRKDLKRTKALLADAQIMLDHLKNNAPSKREIAQLKNQLEEFSEFTCAA AVKARKAMEVEMEDLH  
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ERDQRAAAENREKEQNKRLQRQLRDTKEEMSELARKEAEASRKKHELEMDLESLEAANQSLQADLKLAFK  
RIGDLQAAIEDEMESDENEDLINSEGDSDVSELED RVDGVKSWLSKNKGPSKAPSDDGSLKSSSPTSHW  
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TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

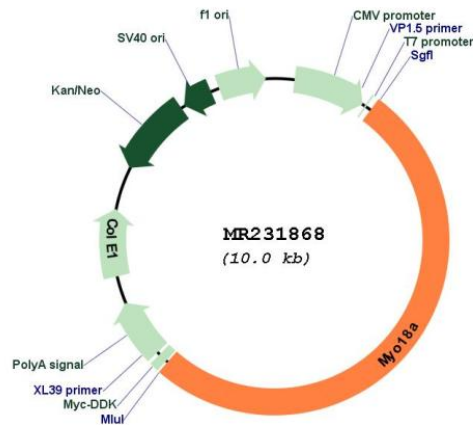
**Restriction Sites:**

Sgfl-MluI

## Cloning Scheme:



## Plasmid Map:



ACCN: NM\_001291215

ORF Size: 5166 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\\_001291215.1](#), [NP\\_001278144.1](#)

**RefSeq Size:** 6417 bp

**RefSeq ORF:** 5169 bp

**Locus ID:** 360013

**UniProt ID:** [Q9JMH9](#)

**Cytogenetics:** 11 B5

**MW:** 196.4 kDa

**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]