OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MR231913

Myo18a (NM_001291213) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Myo18a (NM_001291213) 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:	>MR231913 representing NM_001291213 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGTTTAACCTCATGAAGAAAGATAAGGACAAAGATGGCGGGCGGAAGGAGAAGAAGGAAAAAAAGGAGA AGAAGGAGAGGATGTCTGCGGCAGAACTGCGGAGCCTGGAAGAGATGAGCATGCGCCGTGGCTTTTTCAA CTTGAACCGGTCCTCCAAGCGGGAATCTAAGACGCGCCTGGAAATCTCCAACCCCATCCCTATCAAGGTG GCCAGTGGCTCTGACCTGCACCTGACGGACATTGACTCTGACAGCAATCGGGGTAGCATCATCCTGGACT CAGGACACCTAAGCACAGCCAGCTCCAGTGATGACCTCAAGGGTGAAGAAGGCAGCTTCCGGGGCTCTGT GCTGCAGCGGGCAGCCAAGTTCGGTTCACTGGCCAAGCAGAACTCTCAGATGATTGTCAAACGTTTTTCC TTCTCTCAACGGAGCCGGGATGAGAGTGCCTCGGAGACCTCAACCCCCTCAGAGCACTCTGCAGCCCCAT CACCTCAGGTAGAGGTGCGGACGCTTGAGGGACAGCTAATGCAGCATCCTGGGCTAGGCATTCCTCGACC AGGACCACGGTCTCGAGTCCCTGAGCTGGTGACTAAAAGATTCCCAGCTGATCTACGTCTTCCCGCTCTG GTGCCACCACCACCTCCTGCTCTCCGGGAGCTGGAGTTACAACGAAGACCCACAGGAGACTTTGGCTTCT CACTGCGGCGCACAACCATGCTGGATCGGGCCCCTGAGGGTCAGGCTTATCGACGGGTGGTTCACTTTGC TGAGCCAGGGGCAGGCACCAAGGACCTGGCCTTGGGGCTGGTACCAGGAGATCGACTGGTGGAGATTAAT GGACAGAATGTGGAGAATAAATCCAGGGATGAAATTGTGGAGATGATCCGGCAGTCTGGGGACAGTGTGC GGCTCAAGGTACAGCCCATCCCAGAGCTTAGCGAGCTGAGCCGGAGCTGGCTTCGGACTGGCGAGGGACA CCGCAGGGAGCCGGCTGATCTGGACCCCGAGGCCGCCTCTCCTGCCTACAGCCAGGTAGGGTGCTCCTGC CCCACCCAGGAGCCCTCTGCTTTCTCCAGTGACAACCCACCACCCCCACCCTGTACCTGGGCTGGCGTCT GTGCTCGGGCCTCCTGCTGGAGTGCCAAGACGGAAGAGCAGATTGCCGCTGAAGAGGCCTGGTATGAGAC GGAGAAGGTGTGGCTGGTCCATAGAGATGGATTCTCCTTAGCCAGCCAGCTCAAGTCTGAGGAGCTCAGC CTACCCGAGGGGAAGGCGCGTGTGAAGCTGGACCATGACGGAGCCATCCTGGATGTGGATGAAGATGATA TAGAGAAGGCTAATGCTCCTTCATGTGACCGTCTAGAAGATCTGGCCTCACTGGTATACCTCAACGAGTC TAGCGTCCTGCATACACTGCGCCAGCGCTATGGGGCTAGCCTGCTACACACCTATGCTGGCCCCAGCCTG CTTGTCCTTAGCACCCGAGGGGCTCCTGCTGTGTATTCAGAGAAGGTGATGCACATGTTCAAGGGGTGTC

View online »

GGCGGGAGGACATGGCACCCCACATCTACGCTGTAGCCCAGACTGCATATAGGGCGATGTTGATGAGTCG
TCAGGACCAGTCCATTGTCCTTCTGGGTAGTAGTGGCAGTGGCAAGACTACCAGCTTTCAGCATCTGGTG
CAGTATCTGGCTACCATCGCGGGTACCAGTGGGACCAAGGTGTTCTCAGTGGAGAAGTGGCAGGCTCTGT
CCACCCTCCTGGAAGCCTTTGGGAACAGCCCCACCATCATGAATGGCAGTGCCACCCGCTTCTCCCAGAT
CCTCTCCCTGGACTTTGACCAAGCTGGCCAGGTGGCTTCGGCCTCCATCCAGACAATGCTCCTGGAGAAG
CTGCGTGTGGCCCGGCGCCCAGCCAGTGAGGCTACTTTCAATGTCTTCTACTACTTGCTGGCCTGTGGGG
ATGCCACCCTCAGGACAGAGCTCCACCTGAACCACTTGGCAGAGAACAATGTGTTTGGAATTGTGCCACT
GTCCAAGCCTGAGGAGAAGCAGAAGGCTGCACAGCAGTTCAGTAAGCTCCAGGCTGCCATGAAGGTGCTG
GCCATCTCCCCCGAGGAACAGAAGACCTGCTGGCTCATCCTGGCTTCCATCTACCACCTGGGGGCTGCTG
GAGCTACCAAAGAAGCTGCTGAAGCTGGACGAAAGCAGTTTGCCCGCCACGAATGGGCCCAGAAGGCAGC
ATACCTGCTGGGCTGCAGCTTGGAAGAGCTGTCCTCGGCTATCTTCAAACACCAGCTAAAAGGAGGCACC
CTGCAACGGTCCACCTCCTTCCGTCAGGGCCCTGAGGAGAGCGGCCTGGGAGAGGGCACCAAACTGAGTG
CTCTGGAGTGCTTAGAGGGTATGGCGTCTGGCCTCTACAGTGAGCTCTTTACTCTCCTCATCTCCCTGGT
AAACAGGGCTCTCAAGTCCAGCCAGCACTCACTCTGTTCCATGATGATCGTGGACACACCAGGCTTCCAG
AACCCTGAATGGGGCGGCTCGGCCCGTGGAGCCTCCTTCGAGGAGCTGTGCCACAACTATGCCCAGGACA
GGCTGCAGAGGCTGTTCCACGAGCGCACCTTCCTCCAGGAGTTGGAGAGATACAAGGAGGATAACATAGA
ACTGGCGTTTGATGACTTGGAGCCAGTTGCAGATGACTCCGTGGCTGCTGTGGACCAGGCTTCCCACCTG
GTTCGCTCACTGGCCCATGCCGATGAGGCAAGAGGGCTACTGTGGCTCCTGGAAGAGGAGGCACTGGTGC
CTGGTGCGACAGAGGATGCCCTCCTTGATCGTCTTTTCTCCTATTATGGCCCCCAGGAGGGTGACAAAAA
AGGCCAGAGTCCTCTTCTGCGAAGTAGCAAACCTCGGCACTTTCTCCTGGGCCACAGCCACGGTACCAAC
TGGGTGGAGTACAACGTGGCTGGCTGGCTGAATTACACCAAGCAGAACCCAGCCACCCAGAATGCACCCC
GGCTTCTGCAGGACTCCCAGAAAAAGATCATCAGTAACCTGTTTCTGGGCCGGGCGGGCAGTGCCACGGT
GCTCTCAGGCTCGATTGCAGGCCTGGAAGGTGGCTCCCAGCTGGCCTTGCGCCGGGCAACCAGCATGAGG
AAAACCTTCACCACCGGCATGGCCGCTGTCAAGAAGAAGTCGCTGTGCATACAGATTAAGCTGCAAGTAG
ATGCCCTCATTGATACCATCAAGAGGTCCAAGATGCATTTCGTGCACTGCTTCCTTCCTGTGGCCGAGGG
CTGGCCTGGGGAGCCCCGGTCTGCCTCTTCCCGCAGAGTCAGCAGCAGCAGTGAGCTGGACCTGCCCCCG
GGAGACCCCTGTGAGGCTGGGCTGCTACAACTGGATGTGTCCCTGCTCCGAGCCCAGCTCCGGGGATCCC
GCCTGCTTGATGCGATGCGCATGTACCGCCAAGGTTACCCAGACCACATGGTGTTTTCTGAGTTCCGCCG
GCGCTTTGATGTCCTGGCTCCACACCTGACCAAGAAACATGGTCGTAACTACATCGTGGTGGATGAGAAG
CGGGCTGTGGAAGAGCTGCTGGAGTCCCTGGACCTGGAAAAGAGCAGCTGCTGTCTGGGCCTAAGCCGGG
TGTTCTTCCGGGCAGGCACGTTGGCACGGTTGGAAGAACAACGAGACGAGCAAACCAGCAGGCACCTGAC
CCTGTTCCAGGCAGCCTGCCGGGGCTACCTTGCCCGCCAGCACTTCAAGAAGAGAAAGATCCAGGACCTG
GCCATTCGCTGTGTGCAGAAGAACATCAAGAAGAACAAGGGGGTGAAGGACTGGCCCTGGTGGAAGCTCT
TCACCACCGTGCGGCCCCTCATCCAAGTTCAGCTGTCAGAGGAGCAGATCCGAAACAAAGACGAGGAGAT
CCAGCAGCTGCGCAGCAAGCTTGAGAAGGTGGAGAAGGAGAGGAACGAGCTCCGACTCAGCAGTGACCGG
CTAGAGACCCGGATCTCAGAACTGACATCGGAGCTGACTGATGAACGCAACACGGGAGAGTCCGCCTCCC
AGCTGCTGGACGCGGAGACAGCCGAGAGGCTCCGGACCGAGAAGGAGATGAAAGAGCTACAGACCCAGTA
TGACGCACTGAAGAAGCAGATGGAGGTGATGGAGATGGAAGTGATGGAAGCCCGGCTCATTCGGGCAGCC
GAGATCAACGGGGAGGTGGATGATGATGATGCAGGGGGAGAGTGGAGGCTGAAGTACGAGCGAGCTGTTC
GGGAGGTGGACTTCACCAAGAAGCGGCTCCAGCAGGAGCTGGAAGACAAGATGGAGGTGGAACAGCAGAG
CAGGAGGCAGCTGGAGAGGCGGCTTGGGGACCTGCAAGCAGATAGTGATGAGAGTCAACGGGCACTGCAG
CAGCTCAAGAAGAAGTGCCAAAGGCTCACAGCTGAGCTGCAGGACACCAAGCTGCACCTGGAGGGCCAGC
AGGTCCGAAACCACGAGCTGGAGAAGAAGCAGAGGAGGTTCGACAGTGAGCTTTCCCAGGCCCACGAGGA
GACGCAGCGGGAGAAGCTGCAGAGGGAGAAACTCCAGCGGGAGAAGGACATGCTCCTGGCTGAGGCTTTC
AGCTTGAAGCAGCAAATGGAGGAAAAAGACTTGGACATTGCGGGGTTTACCCAGAAGGTGGTTTCCTTGG
AGGCTGAGCTTCAGGACATTTCTTCTCAAGAGTCTAAGGATGAGGCTTCTCTGGCCAAGGTCAAGAAGCA
GCTCCGGGACTTGGAGGCCAAGGTCAAGGACCAGGAAGAGGAGCTGGATGAGCAGGCTGGGAGTATACAG
ATGCTGGAGCAGGCCAAGCTGCGTCTGGAGATGGAGATGGAGAGAATGAGACAGACCCATTCCAAGGAGA
TGGAGAGTCGGGATGAGGAGGTGGAAGAGGCCCGGCAGTCATGTCAGAAGAAGTTAAAACAGATGGAAGT
GCAGCTCGAGGAGGAGTATGAAGACAAGCAGAAGGCGCTGCGGGAGAAACGGGAGCTGGAGAGCAAGCTC
TCCACGCTCAGTGACCAGGTGAACCAGCGGGACTTTGAATCAGAGAAGCGGCTACGGAAAGACCTGAAGC
GCACCAAAGCGCTGCTGGCAGATGCCCAGATCATGCTGGACCACTTAAAGAACAATGCCCCGAGCAAGAG

GGAGATTGCCCAGCTGAAGAACCAGCTGGAAGAGTCGGAATTCACCTGTGCAGCAGCTGTAAAGGCACGG
AAAGCGATGGAGGTGGAGATGGAAGACCTGCACCTGCAGATTGATGACATCGCCAAAGCCAAGACAGCGC
TGGAGGAGCAACTGAGTCGACTTCAGCGTGAGAAAAACGAGATTCAAAACCGGCTGGAAGAGGATCAGGA
GGACATGAATGAGCTGATGAAGAAGCACAAGGCAGCTGTGGCCCAGGCCTCCCGGGACATGGCACAGATG
AACGATCTCCAGGCTCAGATTGAAGAGTCCAACAAGGAGAAGCAAGAGCTACAGGAGAAGCTACAAGCTC
TGCAGAGCCAGGTGGAGTTCCTGGAGCAGTCCATGGTGGACAAGTCCCTCGTCAGCAGGCAGGAAGCGAA
GATCAGGGAGCTGGAGACACGCCTGGAGTTCGAAAAGACCCAAGTGAAGCGCCTGGAGAACCTGGCCAGT
CGGCTCAAAGAAACCATGGAGAAGCTGACTGAGGAACGGGACCAGCGCGCCGCAGCTGAGAACCGTGAGA
AGGAGCAGAACAAGAGGCTCCAGCGACAGCTTCGTGACACCAAGGAGGAGATGAGCGAGCTTGCCAGGAA
GGAAGCCGAGGCTAGCCGCAAGAAGCATGAACTGGAGATGGACCTGGAGAGCCTGGAAGCTGCTAACCAA
AGCCTGCAAGCCGACCTAAAGCTGGCGTTCAAACGCATTGGGGACTTGCAAGCTGCCATTGAGGATGAGA
TGGAAAGTGACGAGAACGAGGACCTCATCAACAGTGAGGGGGACTCAGATGTGGACTCAGAGCTGGAGGA
CCGGGTCGACGGGGTCAAGTCCTGGTTGTCAAAGAACAAGGGACCTTCTAAGGCACCTTCTGACGATGGC
AGCTTGAAGAGTTCCAGCCCAACCAGCCACTGGAAGCCACTCGCCCCTGACCCATCGGATGATGAGCATG
ATCCTGTGGACAGCATCTCCAGACCCCGGTTCTCCCACAGCTATCTGAGTGACAGCGACACAGAGGCCAA
GCTGACAGAGACCAGTGCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

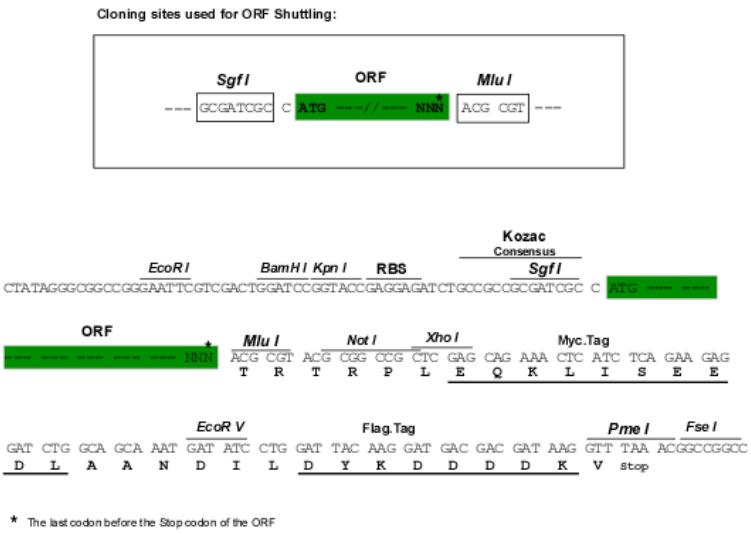
>MR231913 representing NM_001291213
Red=Cloning site Green=Tags(s)

MFNLMKKDKDKDGGRKEKKEKKEKKERMSAAELRSLEEMSMRRGFFNLNRSSKRESKTRLEISNPIPIKV
ASGSDLHLTDIDSDSNRGSIILDSGHLSTASSSDDLKGEEGSFRGSVLQRAAKFGSLAKQNSQMIVKRFS
FSQRSRDESASETSTPSEHSAAPSPQVEVRTLEGQLMQHPGLGIPRPGPRSRVPELVTKRFPADLRLPAL
VPPPPPALRELELQRRPTGDFGFSLRRTTMLDRAPEGQAYRRVVHFAEPGAGTKDLALGLVPGDRLVEIN
GQNVENKSRDEIVEMIRQSGDSVRLKVQPIPELSELSRSWLRTGEGHRREPADLDPEAASPAYSQVGCSC
PTQEPSAFSSDNPPPPPCTWAGVCARASCWSAKTEEQIAAEEAWYETEKVWLVHRDGFSLASQLKSEELS
LPEGKARVKLDHDGAILDVDEDDIEKANAPSCDRLEDLASLVYLNESSVLHTLRQRYGASLLHTYAGPSL
LVLSTRGAPAVYSEKVMHMFKGCRREDMAPHIYAVAQTAYRAMLMSRQDQSIVLLGSSGSGKTTSFQHLV
QYLATIAGTSGTKVFSVEKWQALSTLLEAFGNSPTIMNGSATRFSQILSLDFDQAGQVASASIQTMLLEK
LRVARRPASEATFNVFYYLLACGDATLRTELHLNHLAENNVFGIVPLSKPEEKQKAAQQFSKLQAAMKVL
AISPEEQKTCWLILASIYHLGAAGATKEAAEAGRKQFARHEWAQKAAYLLGCSLEELSSAIFKHQLKGGT
LQRSTSFRQGPEESGLGEGTKLSALECLEGMASGLYSELFTLLISLVNRALKSSQHSLCSMMIVDTPGFQ
NPEWGGSARGASFEELCHNYAQDRLQRLFHERTFLQELERYKEDNIELAFDDLEPVADDSVAAVDQASHL
VRSLAHADEARGLLWLLEEEALVPGATEDALLDRLFSYYGPQEGDKKGQSPLLRSSKPRHFLLGHSHGTN
WVEYNVAGWLNYTKQNPATQNAPRLLQDSQKKIISNLFLGRAGSATVLSGSIAGLEGGSQLALRRATSMR
KTFTTGMAAVKKKSLCIQIKLQVDALIDTIKRSKMHFVHCFLPVAEGWPGEPRSASSRRVSSSSELDLPP
GDPCEAGLLQLDVSLLRAQLRGSRLLDAMRMYRQGYPDHMVFSEFRRRFDVLAPHLTKKHGRNYIVVDEK
RAVEELLESLDLEKSSCCLGLSRVFFRAGTLARLEEQRDEQTSRHLTLFQAACRGYLARQHFKKRKIQDL
AIRCVQKNIKKNKGVKDWPWWKLFTTVRPLIQVQLSEEQIRNKDEEIQQLRSKLEKVEKERNELRLSSDR
LETRISELTSELTDERNTGESASQLLDAETAERLRTEKEMKELQTQYDALKKQMEVMEMEVMEARLIRAA
EINGEVDDDDAGGEWRLKYERAVREVDFTKKRLQQELEDKMEVEQQSRRQLERRLGDLQADSDESQRALQ
QLKKKCQRLTAELQDTKLHLEGQQVRNHELEKKQRRFDSELSQAHEETQREKLQREKLQREKDMLLAEAF
SLKQQMEEKDLDIAGFTQKVVSLEAELQDISSQESKDEASLAKVKKQLRDLEAKVKDQEEELDEQAGSIQ
MLEQAKLRLEMEMERMRQTHSKEMESRDEEVEEARQSCQKKLKQMEVQLEEEYEDKQKALREKRELESKL
STLSDQVNQRDFESEKRLRKDLKRTKALLADAQIMLDHLKNNAPSKREIAQLKNQLEESEFTCAAAVKAR
KAMEVEMEDLHLQIDDIAKAKTALEEQLSRLQREKNEIQNRLEEDQEDMNELMKKHKAAVAQASRDMAQM
NDLQAQIEESNKEKQELQEKLQALQSQVEFLEQSMVDKSLVSRQEAKIRELETRLEFEKTQVKRLENLAS
RLKETMEKLTEERDQRAAAENREKEQNKRLQRQLRDTKEEMSELARKEAEASRKKHELEMDLESLEAANQ
SLQADLKLAFKRIGDLQAAIEDEMESDENEDLINSEGDSDVDSELEDRVDGVKSWLSKNKGPSKAPSDDG
SLKSSSPTSHWKPLAPDPSDDEHDPVDSISRPRFSHSYLSDSDTEAKLTETSA

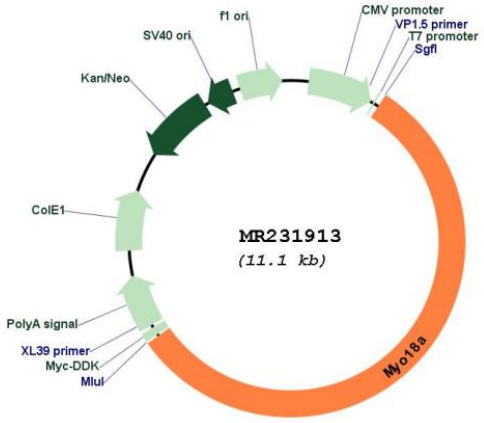
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001291213
ORF Size:	6249 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_001291213.1, NP_001278142.1
RefSeq Size:	7504 bp
RefSeq ORF:	6252 bp
Locus ID:	360013
UniProt ID:	Q9JMH9
Cytogenetics:	11 B5
MW:	236.3 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]