

Product datasheet for **MG215788**

Myo7b (NM_032394) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Myo7b (NM_032394) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Myo7b
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG215788 representing NM_032394 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGTCCGTGTTCCGGCTGGGTGACCATGTGTGGCTGGACCCTCCCTCCAGCAGCAAGACTGGTGTGGCCA
TTGGGGGCATTGTCAAAGAAACAAAACCTGGGAAAGACCTTGATTGAGGATGACGAGGGCAAGGAACACTG
GGTCCATGCAGAAGACCTCAGCACCCCTCAGGCCTATGCACCCCACTCAGCCCAAGGAGTGGATGACATG
ATCCGCCTAGGGGACCTGAATGAGGCTGGTGTGGTGCACAACCTCCTGATCCGGTACCAGCAGCACAAGA
TCTATACCTACACAGGCTCCATCCTGGTGGCTGTGAACCCATTCCAGATGCTGCCCTGTACACCCTGGA
GCAGGTACAAATCTACTACAGCCGCCACATGGGCGAGCTGCCTCCCCACATCTTCGCCATTGCCAACAGC
TGCTACTTCAACATGAAGAAGAAACAAGAGGGACCAAGTGTGTATCATCAGTGGCGAGTCTGGGGCCGGGA
AGACCGAGACCACCAAGCTTATCCTTCAGTTCTCGCCACGGTCAGTGGCCAGCATTCTGGATCGAGCA
ACAGGTCTGGAGGCCAACCCCATCCTGGAAGCCTTTGGCAATGCCAAGACCATCCGCAATGACAACTCC
AGCCGCTTCGGGAAGTACATTGACATCCACTTCAATTCTAGTGGGGTGATTGAGGGCGCAAGCATTGAAC
ACTTCTCCTGGAGAAGTCCAGAGTCTGCCGGCAGGCTCCAGAGGAACGCAACTACCACATCTTCTACTG
CATGCTGATGGGGATGAGCCCGGAAGAGAAGCAAATGCTGAGTCTGGGCATGCCCTCTGAGTACCATTAC
CTGACCATGGGGAGCTGCACATCCTCCGAGGGGCTCAGCGATGCCAAGGACTACGCACACGTCCGCTCGG
CCATGAAGATCCTCCAGTTCTCAGACTCAGAGAACTGGGACATCAGCAAGCTGCTGGCAGCCATCCTCCA
CCTGGGGAATGTGGGGTTCATGGCTGCAGTCTTTGAGAACCTGGATTCTGCTGATGTGATGGAACTCCA
GCCTTCCCTTTGGCAATGAAGTTGCTAGAGGTGCAGCACCAGGCTCTCCGAGACTGTTTGATCAAACACA
CAATCCCTGTCTTGGAGAGTTTGTCTCCAGGCCTGTGAACATCGCCAGGCTACAGACCGGAGGGATGC
CTTTGTCAAGGGCATCTATGGGCGCCTCTTCCAGTGGATTGTCAAGAAAATCAATGCTGCGATCTTCACT
CCCCAAGCCCAGGATCCCCAAAATGTGCGGAGGGCCATCGGTCTCCTGGACATATTTGGCTTTGAAAAC
TCCAGAACAATAGCTTTGAGCAACTCTGCATCAACTTTGCCAAGCAGCACCTTCAGCAATTCTTCGTGAA
GCACGTGTTACGATGGAGCAGGAAGAGTACCTGTCTGAGAATCACCTGGAACATACATCCACTACACC
GACAACCAAGCCCATCCTGGACATGCTGGCCCTCAAGCCCATGAGCATCATCTCTCCTAGATGAGGAGA
GCCGCTTCCACAGGGGACAGATGTCACTATGCTGCAGAACTGAACAGTATCCATGCCAACAAACAGTC



[View online »](#)

CTTCCTGAGCCCCAGGAGCATCCATGACACCCGATTTGGGATCGCACACTTCGCGGGCGATGTATACTAC
CAGGCAGAAGGCTTTCTGGAGAAGAATCGAGATGTGCTGAGCACAGATATCCTAATCCTGATTATTCTCT
CGAAAAACAAGTTTCTGAAGGAGATATTTAACGTGGACTCATCACAGACTAAGCTGGGGCACGGCACCAT
CTGCCAGGTGAAGGCAGGAAGCCAGCTCTTCAAGTCATCAGACTCCATCAAGCGCCCCGTACCCCTCGCG
AGCCAGTTCAAGCAGTCTCTGGACCAGTGTGAGAATCCTGACCAACTGCCAGCCCTATTTTGTCCGCT
GCATTAACCCCAATGAGTACAAGAAGCCACTGCTGTTTGACCGAGAGCTGTGCATTACAGCAGCTGCGTTA
TTCCGGCATGATGGAGACTGTGCACATCCGCAAGTCAGGTTTTCCCATCCGCTACACATTTGATGAGTTT
TCACAGAGATTCCGTGTGCTGCTGCCAGCCCGGAGCGTATGCAGTTTCAGAACAAGCCCCGCCAGATGA
CCTTGACATTGCTGACCTATGCCTGGGGACAGACAAAGACTGGAAGTCGGAAGACCAAAATCTTCCT
GAAGGATCATCAGGACACAGTGTGGAGATCCGACAGGAGCCAGGCCCTGGACGGAGCAGCGATCCGGATC
CAGAGAGTCTCCGGGGACACAAGTACAGGAAGGAGTTCTGAGGCAGAGACGTGCAGCTGTGACCTCC
AGGCAGGGTGGCAGGCTATAGCCAAAGAAAGATTTCAAGCTGATCCTAGTGGGCTTTGAACGCTGCA
GGCCATCGCCCGAGCCACCTGCTGATGAGACAGTTCCAGGCCATGCGACAGAGGATAGTGCAGCTGCAG
GCCCGATGCAGGGGCTACCTGGTGCAGACAGCAAGTCCAGGCCAAGAGGAGGGCAGTGGTGATCATTCAAG
CACATGCCAGGGGCTGTTTGTCCGGAAGAGCTACTGGCAACAGAAAAGCACTGGGCCTCAGGTCATTCT
GGCTAAGGAACCAAGGCTCAAGTTGCGGTCCATGAGAGGAAGCGTAAGTCCATCTATGACACTGTCACT
GACACAGCGATGGTGGAGAAAGTGTGGCTTCTCCAGCCATGATTGGAGGTCAAGAGGGTCCAGCCC
CAACACGCTTTGAGGATCTGGAAGTAAAGACCCAGAACTTCTATGAGGTTGATCTGGATACAGTGCCCAT
GATGGCGATGCCAGAAGAGGAGGTGGACAGCCTGGCTGAGTATACCTTCCCAAGTTTGTGTGACTTAC
TTCCAGAAGTCAGCCAGCCACACCCACATCCAGAAGCCCTTCGATACCCACTCCTCTACCATGAAAATG
ACACTGACCACTCGGCTGCTCTAGATGTTTGGATTATCATCCTGAGGTTTCATGGGTGACCTTCCAGAGCC
AGTGGTCTATGGCAGGAACAGCCTGACTGGCAGCTCAGTGATGCGGCAGATCCATGACAACTGGGCAAG
GACAGTGTCACTCAGCACAACAGATCCTACAGGTGGCCAGCCAGCTGAACCTTTGGTGAAGAGGCATTCA
AGTTTGTGAGCCCTATCTCAGACAGACCATGTCTAACCTAGAGAAGGTGCACTTCAATTGTGGGCTACGC
CATCATGCGTCTGACTCAGAGATGAAATCTACTGTGATCTGCAAGCAGCTCTCCGAGAACTACAAA
ACAAGTAGCCGGGCCGGGGCTGGATCCTGCTCAGCCTCTGTCTGGGATGCTTCCACCCTCAGAGAGGT
TCATGAAGTATCTGCTGAATTTATTAGTCAAGGGCCACCCAGCTATGGGCCCTTCTGTGCTGAACGGCT
GCAACGCACCTTCGCAATGGGGTGCAGCAGAACCCCCACCTGGCTGGAGCTGCAGGCTGTCAAGTCC
AAGAAGCAGATCCGATCCAGGTCTCTGGCAACCGGAAGGAGCCTGACCATCTCTGTGACTCCGCT
CCACATCAGGAGAAATCTGCCAGCAGTCGCTCAGAAACAGGGTCTCAGGGACAATCTGGGCTTCTCCCT
CCAGGTGCTGTATATGATAAGTTCTGGTCTTGGGCAGCGGCTGTGACCATTTGATGGATGCTGTGGCC
CAGTGTGAGCAACTGGCCCGAGAGAGGGGAGAGAGCCAGCGGCAGGCCCTGGCGTATCTACTTCCGGA
AGGAGTTCTTACCCCTGGCATGACTCCAGGAGGACCTGTGAGCACTGAGCTCATTTACCACCAAGT
CCTCCGTGGGGTGTGGTCTGGCGAGTATAACTTTGAGAAGGAGGAGGAGCTTGTGGAGCTGCTGGCCCG
CACTGCTATGTGAGCTTGGGGCCACGGTGAAGAGTAACGCTGTCCAGGAGCTGTTGCCAGCTGTGTTT
CCTCCAACTGTACCGGACCAAGTCTCCAGAGAAGTGGGTAGCCTTGTACCCGCTGCCATGCCAAGGC
CCAGTATACCCAGTCGAAAGCCACGCCACTGGCGGTGAGGGAGCAGACAGTGGAGGCTGCCGCTTCTCTG
TGGCCCTGCTCTTCTCCCGCTATTTGAAGTCACCACTCTCTGGTCCCGCCTTCCCAAGACGCAGC
TGGTTTTAGCCATTAAGTGAAGGGGATGACTTCTGGATCAGAAGGAGAGGACACTGCTGGGGTTGTC
CTTCGAGAGGTATGGGTCTGGTGCACAGGACGCCCCAGGAGGGAAGAAGCTGCTTCTCGGCACA
CTCCAGGAAGAGTACGAGTTCGTCTCCCCAGCAGCGTGGCTATTGCAGAGATGGTGGCCTTGTCTTGG
GAGGCTTGAAGGAGAGATCTGTGTTGCCATGGCCCTGCAGGACAGAAGGGCCACAGACGATATACCCCT
TCTGCCCTTCAAGAAAGGTGACTTACTGATCCTGACCAAGAAACAAGGACTGTTGGCCTCAGAGAACTGG
GCTCTGGGTGAGAATGACAGAACTGGCAAGACAGGGCTGGTGCCTACTGCCTGTCTACACCATCCCT
CGGTACCAAGCCCTCAACCCAGCTGCTGAGCTTGCTGGCCATGTACCAGAGAAACGGAAGCTGGCAGC
CCAGGAGGTGCGGGCTCTGGAGCCACCACTGGAGGATCAGCTCACAGAGTCGCCATACACCTGGAGGAA
TTCTCTACCAAGTCTTTCAGGGTCCGGAGAAAGAGACTATCAGCAGGGTGCATGCCATGGCCCGAA
GCCGGGGTCACTCTGGGCCTACTCCCCAGAGCCGCTGCGCCAGCCACTGCTCAAATCTGTCCACGACAA
AGCCAACTGCGGGATGCAGCCTGCCAGATCTTCTTGCCATCCTCAAGTACACAGGTGACTACCTTCC
CGCCAGTCTGGCACAGCCTGGAGCTCAGAGACAGATGTTCTCGTTAGCCCTGCAGGACCCAGCCCTGC
AGGATGAGCTGTACTGCCAGATCCTGAAGCAGCTGACCCACAACCTCCATCAGGTTCAAGTGAAGAGCGAGC
TTGGCAGCTACTTGGCTCTGCACAGGTCTTCCACCTGGGAAGACATTGCTGCCCCACGCTCAGAAG

TTCATAGACTCCCGGAAGAAGAAGCCGCTGGCTCTCGACTGTAGCCGCAGGCTCCACAGGGTTCTAAGGG
 TGGGACCTCGGAAGCAGCCCCACATGATGTAGAGGTGAAAGCGGCTGAGCAGAAATGTCTCCAAATTACA
 CCATGAGGTCTACCTCCCCAATGACACCAGCAAGTCCATGGAAGTGGGCAGCAGTAGTCGGGTGAGAGAC
 CTATGTGAGGGCATAGGCACCAGGCTCCAGCTGGCCTCCTGGGATGGCTGCAGCCTCTTCATCAAGATCA
 CAGACAAGGTCATCAGTCTGAAGGAAGGAGACTTCTTTTTGACAGCTTGAGGCAGGTATCTGACTGGGT
 GAAGAAGAACAGGCCCCAGAAAGAAGGGCCTCCGTGACACTTCCCTATCAGGTGTTCTTCATGCGGAAA
 CTGTGGCTCAACGTGACCCCTGGGAAGGACGTGAATGCAGACACCATACTCCATTACCACCAGGAACACTAC
 CCAAGTACCTCCGCGGGTTTACAAGTGCTCCCGGAAGATGCCATCCACCTGGGAGGTCTCATCTGTAA
 AATCCAGTTTGGTAGTGACAGCTCGCAACTGGCTAGTGTCTCAAAGGTCCTGAAGGAGCTGGTACCTCAG
 AACCTCACACGCCTGATGTCTCAGAAGAATGGAAAAAGAGCCTCCTTCTGGAATGTGACAAAAACAAGC
 GCAAGACAGTGGCAGAGGCCAAAGTGGAGTTCTTGAAGTACATGTACAGGTGGCCACCTTTGGGTCTGC
 CTTCTTTGAGGTGAAGCAAACCTCTGAGCCTTCTACCCAGACATTCTCCTCATCGCCATCAACCGACAT
 GGGTTACTGCTCATCCACCCCAAGACCAAGGAGCTGCTGAACACCTACCCTTTCACCAAGATCTCCAGCT
 GGAGTAGTGGCAACACCTATTTCCACATGGCACTGGGGAGCCTGGGCCAGGGCAGCCGTTTGCTGTGTGA
 GACCTCTCTGGGTTACAAGATGGACGACCTGCTGACCTCATATGTACAGCAGCTCCTGAATACAGTGAAC
 AAACAGCGGGGCTTCAGGGCTCCCGCCCCGGCCAACCCC

ACGCGTACGCGGCGCTCGAG – GFP Tag – GTTTAA

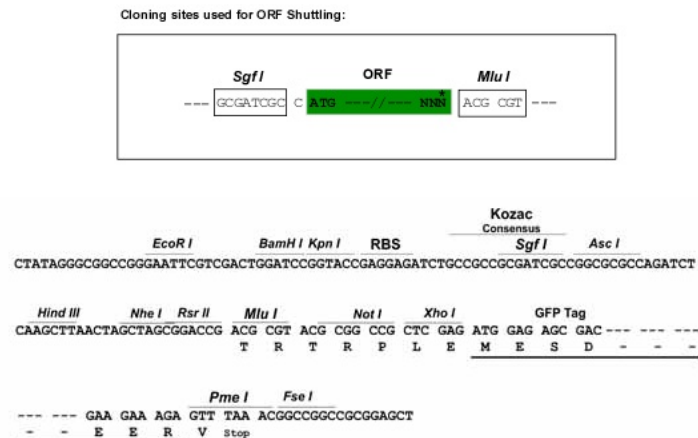
Protein Sequence: >MG215788 representing NM_032394
 Red=Cloning site Green=Tags(s)

```
MSVFRLGDHVLDPSSSKTGVAIGGIVKETLKGTLIEDDEGKEHWVHAEDLSTLRPMHPNSAQGVDDM
IRLDLNEAGVVHNLIRYQQHKIYTYTGSILVAVNPFQMLPLYTLEQVQIYYSRHMGEPPHIFAIANS
CYFNMKKNRDQCCIISGESGAGKTETTKLILQLATVSGQHSWIEQQVLEANPILEAFGNAKTIRNDNS
SRFGKYIDIHFNSSGVIEGASIEHFLLEKSRVCRQAPEERNYHIFYCMLMGMSPEEKQMLSLGMPSEYHY
LTMGSCTSSSEGLSDAKDYAHVRSAMKILQFSDSENWDISKLLAAILHLGNVGFMAAVFENLDSSDVMETP
AFPLAMKLLLEVQHQAALRDCLIKHTIPVLGEFVSRPVNIAQATDRRDAFVKGIYGRLFQWIVKKINAAIFT
PQAQDPQNVRAIGLLDIFGFENFQNNSEQLCINFANEHLQQFFVKHVFTMEQEEYLSNITWNYIHYT
DNQPILDMLALKPMSIISLLDEESRFPQGTDTVMTLQKLSIHANNKSFLSPRSIHDRFGIAHFAAGDVYY
QAEGFLEKNRDLSTDILILIHSSKNFLKEIFNVDSSTKLGHGTICQVKAGSQLFKSSDSIKRPVTLA
SQFKQSLDQLMRILTNCQPYFVRCIKPNEYKKPLLFDELICQQLRYSGMMETVHIRKSGFPIRYTFDEF
SQRFVRLLPSPERMQFQNKPRQMTLHIADLCLGTDKDWKVGKTKIFLKDHDQTVLEIRRSQALDGAIRI
QRVLRGKHYRKEFLRQRAAVTLQAGWRGYSQRKNFKLILVGFERLQAIARSHLLMRQFQAMRQRIVQLQ
ARCRGYLVRQQVQAKRRVVIQAHARGMVVRKSYWQQKSTGPQVILAKEPKAQVAVHERKRKSIYDVT
DTAMVEKVFVGFPLPAMIGGQEGPAPTRFEDLEVKTQKLHEVDLDTVPMAMPPEEVDLSAEYTFPKFAVY
FQKSASHTHIQKPLRYPLLYHENDTDHSAALDVWIIILRFMGDLPEPVVYGRNSLTGSSVMRQIHDKLGK
DSVTQHNRRSSQVASFQNFGEAEFKFDGPISDRPMNSNLEKVFHIVGYAIMRPLRDEIYCQICKQLENYK
TSSRARGWILLSLCLGCFPPSERFMKYLLNFISQGPSSYGPFCARLQRTFANGVRAEPPTWLELQAVKS
KKHIPIQVILATGRSLTISVDSASTSREICQHVAAQKQGLRDNLGFSLQVAVYDKFWSLGSGLDHLMDAVA
QCEQLAREGESQRQAPWRIYFRKEFFTPWHDSQEDPVSTELIYHQLRGVWSGEYNFEKEEELVELLAR
HCYVQLGATVKSNAVQELLPSCVPSKLYRTKSPEKWSLVTAHAKAQYTQSKATPLAVREQTVEARLL
WPLLFSRLFEVTTLSPRLPKTLVLAINWKGMYFLDQKERTLLGLSFAEVMGLVANRDAPGGKLLLAT
LQEEYEFVSPSSVAIAEMVALFLGGLKERSVFAMALQDRRATDDITLLPFKKGDLLILTKKQGLLASENW
ALGQNDRTGKTGLVPTACLYTIPSVTKPSTQLLSLLAMSPEKRLAAQEVRALEPPLEDQLETSPYTLLE
FSYQFFRAPEKETISRAAMPMARSRGLHWAYSPEPLRQPLLKSVHDKAKLRDAACQIFLAILKYTGDP
RQSWHSLLELTDQMFSLALQDPALQDELYCQILKQLTHNSIRFSEERAWQLLWLCTGLFPPGKTLPLHAQK
FIDSRKKKPLALDCSRRLHRLRVGPRKQPPHDVEVKAAEQNVSKLHHEVYLPNDTSKSMVEVGSSSRVRD
LCEGIGTRLQLASWDGCSLFIKITDKVISLKEGDDFFDSLQVSDWVKKNRPQKEGASVTLPYQVFFMRK
LWLVNTPGKDVNADTILHYHQLPKYLRGFHKCSREDAIHLGGLICKIQFGSDSSQLASVSKVLKELVPQ
NLTRLMSSEEWKSLLECDKNKRKTVAEAKVEFLKMYRWPTFGSAFFEYKQTSSEPSYDILLIAINRH
GLLLIHPKTKELLNTYPFTKISSWSSGNTYFHMALGSLGQGSRLLCETSLGYKMDLLTSYVQQLLNTVN
KQRGFRAPANP
```

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_032394

ORF Size: 6339 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_032394.3](#), [NP_115770.2](#)

RefSeq Size: 6591 bp

RefSeq ORF: 6342 bp

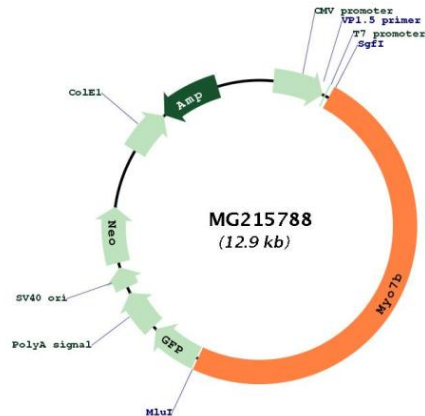
Locus ID: 17922

UniProt ID: [Q99MZ6](#)

Cytogenetics: 18 17.89 cM

Gene Summary: Myosins are actin-based motor molecules with ATPase activity. Their highly divergent tails are presumed to bind to membranous compartments, which would be moved relative to actin filaments. As part of the intermicrovillar adhesion complex/IMAC plays a role in epithelial brush border differentiation, controlling microvilli organization and length. May link the complex to the actin core bundle of microvilli.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG215788