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 MG212106

Myh10 (NM_175260) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Myh10 (NM_175260) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Myh10
Synonyms:	5730504C04Rik; 9330167F11Rik; Fltn; mKIAA3005; Myhn-2; Myhn2; NMHC-B; NMHC II-B; NMHCII-B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG212106 representing NM_175260
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCCAGAGAACTGGACTGGAGGATCCCGAGAGGTATCTCTTTGTGGACAGGGCTGTCATCTACAACC
CTGCCACTCAAGCTGACTGGACAGCTAAAAAGCTGGTGTGGATTCCATCGGAACGCCATGGTTTTGAGGC
AGCTAGTATTAAAGAAGAGCGGGGCGATGAGGTTATGGTGGAGCTGGCAGAGAATGGGAAGAAAGCAATG
GTCAACAAAGATGACATTCAGAAGATGAACCCACCAAAGTTCTCCAAGGTGGAGGATATGGCAGAGCTGA
CATGCTTGAACGAAGCCTCTGTCTTACATAATTTGAAGGACCGCTACTATTCAGGACTTATCTATACTTA
CTCTGGACTCTTCTGTGTGGTGATAAATCCTTACAAGAACCTTCCAATTTACTCTGAGAATATTATTGAA
ATGTATAGAGGGAAGAAACGCCATGAGATGCCACCACACATCTACGCCATATCAGAGTCTGCTTACAGAT
GCATGCTTCAAGATCGTGAGGACCAGTCAATTCTATGCACGGGTGAATCGGGTGCCGGGAAGACAGAAAA
TACCAAGAAAGTCATTCAGTACCTTGCCCACGTTGCTTCTTCTCACAAAGGAAGAAAGGACCATAATATT
CCTGGGGAACTTGAACGGCAGCTTTTACAAGCAAATCCAATTCTGGAATCCTTTGGAAATGCGAAGACTG
TGAAAAATGATAACTCATCTCGCTTTGGCAAGTTTATCCGGATCAACTTTGATGTAACTGGCTATATTGT
TGGGGCCAACATTGAAACATACCTTCTGGAAAAGTCTCGTGCTGTTCGTCAAGCTAAAGATGAGCGTACA
TTTCATATCTTTTATCAGTTGCTCTCTGGAGCAGGGGAACACCTGAAATCCGACTTACTCCTGGAAGGTT
TCAACAACTACAGATTCCTCTCCAATGGCTATATTCCTATTCCTGGACAGCAAGACAAGGATAACTTCCA
GGAGACCATGGAAGCCATGCACATCATGGGCTTCTCTCACGAAGAGATCCTCTCAATGCTTAAAGTCGTA
TCTTCAGTGCTGCAGTTTGGAAACATCTCTTTCAAAAAGGAGAGAAACACTGACCAAGCCTCCATGCCGG
AGAACACAGTCGCACAGAAGCTCTGCCACCTGCTCGGGATGAATGTGATGGAGTTCACTCGGGCTATCCT
CACGCCCAGGATCAAGGTTGGCCGGGATTACGTACAGAAAGCCCAGACCAAAGAGCAGGCTGATTTTGCA
GTGGAAGCATTGGCAAAAGCTACCTATGAGCGGTTGTTTCGCTGGCTCGTTCACCGCATCAATAAAGCGC
TGGATAGGACCAAACGCCAGGGAGCTTCCTTCATTGGGATCCTGGATATTGCTGGTTTTGAAATTTTTGA

View online »

GCTGAACTCCTTCGAGCAGCTGTGCATCAACTACACCAACGAGAAGCTGCAGCAGCTGTTCAACCACACC
ATGTTCATCCTGGAGCAGGAGGAGTACCAGCGAGAGGGCATCGAGTGGAACTTTATCGACTTCGGCCTGG
ACCTGCAGCCCTGCATCGACCTGATAGAGAGACCTGCCAATCCCCCTGGCGTGCTGGCCCTCCTGGATGA
AGAATGCTGGTTCCCCAAAGCTACAGATAAAACATTTGTTGAAAAGCTGGTTCAGGAGCAAGGTTCCCAC
TCCAAGTTTCAGAAGCCGCGCCAACTGAAAGACAAAGCCGACTTCTGCATCATCCACTACGCGGGGAAGG
TGGACTATAAGGCAGATGAGTGGCTGATGAAGAACATGGACCCGCTGAATGACAACGTGGCCACCCTCCT
GCACCAGTCCTCGGACAGATTTGTGGCTGAGCTTTGGAAGGACGTGGACCGAATTGTAGGTCTGGATCAA
GTCACTGGGATGACTGAGACCGCGTTTGGCTCTGCATACAAAACCAAGAAGGGCATGTTCCGAACCGTCG
GGCAGCTCTACAAGGAGTCTCTCACCAAGCTGATGGCAACTCTCCGCAACACCAACCCCAACTTCGTCCG
CTGCATCATTCCAAATCACGAGAAGCGGGCTGGGAAACTGGACCCGCACCTCGTGCTCGATCAGCTTCGC
TGTAACGGCGTCCTGGAAGGGATCCGGATCTGTCGCCAGGGGTTCCCCAACCGGATAGTTTTCCAGGAAT
TCAGACAGAGATATGAGATCCTAACTCCCAATGCTATTCCTAAAGGCTTCATGGATGGCAAACAGGCGTG
TGAGCGAATGATCCGAGCTTTAGAACTGGACCCAAACCTGTATAGAATTGGACAGAGCAAGATATTTTTC
CGAGCTGGAGTTTTGGCGCACTTAGAAGAAGAAAGAGATTTAAAAATCACTGATATCATCATCTTTTTCC
AAGCTGTATGCAGAGGCTACCTCGCCCGAAAGGCCTTTGCCAAGAAACAGCAACAACTAAGTGCCTTAAA
GGTCTTGCAGCGGAACTGTGCGGCGTACCTGAAGCTGCGACACTGGCAGTGGTGGCGTGTCTTCACGAAG
GTGAAGCCTCTCCTCCAAGTGACCCGCCAGGAGGAAGAACTCCAGGCAAAAGATGAGGAGCTGCTGAAGG
TGAAAGAGAAGCAGACAAAAGTGGAAGGGGAGCTTGAGGAGATGGAGCGGAAGCACCAGCAGCTGCTGGA
AGAGAAGAATATCCTGGCAGAACAACTGCAAGCCGAGACCGAGCTCTTCGCTGAAGCAGAAGAGATGAGA
GCAAGGCTTGCTGCCAAAAAGCAGGAACTGGAGGAGATTCTCCATGACCTCGAGTCCAGGGTGGAGGAGG
AGGAAGAGCGGAACCAGATCCTACAGAATGAGAAGAAGAAGATGCAGGCGCACATTCAGGACCTAGAAGA
ACAACTGGATGAGGAGGAGGGGGCCCGGCAAAAGCTGCAGCTGGAGAAGGTGACAGCAGAGGCTAAAATC
AAGAAGATGGAAGAGGAGGTTCTGCTTCTCGAAGACCAGAATTCCAAATTTATCAAAGAAAAGAAACTCA
TGGAAGACCGAATTGCTGAGTGTTCCTCTCAGCTGGCTGAAGAGGAAGAAAAGGCAAAAAACTTGGCCAA
AATCAGGAATAAGCAAGAAGTGATGATCTCGGACTTAGAAGAACGCTTGAAGAAGGAGGAGAAAACTCGA
CAGGAACTGGAAAAGGCCAAACGGAAGCTGGATGGGGAAACAACCGATCTGCAGGACCAGATCGCTGAGC
TGCAGGCACAGGTCGATGAGCTCAAAGTCCAGTTGACCAAGAAGGAGGAGGAGCTTCAGGGGGCGCTGGC
CAGAGGAGATGATGAGACACTGCACAAGAATAATGCACTTAAAGTTGCACGGGAGCTGCAGGCCCAAATC
GCAGAGCTCCAGGAAGACTTTGAGTCTGAAAAGGCTTCAAGGAACAAGGCTGAGAAACAAAAACGGGACT
TGAGTGAGGAGCTGGAAGCTCTGAAGACAGAGCTGGAGGACACCCTAGACACCACAGCAGCTCAGCAGGA
ACTCCGCACAAAACGTGAGCAGGAAGTGGCAGAGCTGAAGAAGGCTCTTGAGGATGAAACTAAGAACCAC
GAAGCTCAGATCCAGGACATGAGACAGAGGCATGCCACAGCGCTGGAGGAGCTTTCCGAGCAGCTGGAGC
AAGCGAAAAGGTTCAAAGCCAACCTGGAGAAGAACAAACAGGGCCTGGAGACAGACAACAAGGAGCTGGC
GTGTGAGGTGAAGGTGCTGCAGCAGGTGAAGGCGGAGTCAGAGCACAAGAGGAAGAAGCTGGATGCCCAG
GTCCAGGAGCTCCATGCCAAGGTGTCAGAGGGTGACAGGCTCAGGGTAGAGCTGGCCGAGAAAGCAAACA
AGCTACAGAATGAGCTGGATAATGTGTCAACCCTGCTGGAAGAAGCTGAGAAGAAAGGTATTAAGTTTGC
GAAGGATGCAGCTGGTCTCGAGTCTCAACTACAGGACACACAGGAGCTCCTTCAGGAAGAGACACGGCAG
AAACTGAACCTGAGCAGTCGGATCCGGCAGCTGGAGGAGGAGAAGAACAGCCTTCAGGAGCAGCAGGAGG
AGGAGGAGGAGGCCAGGAAGAACCTGGAGAAGCAGGTGTTGGCTCTGCAGTCCCAGCTGGCTGACACCAA
GAAGAAAGTGGACGATGACCTGGGGACAATCGAGAGTTTGGAGGAAGCCAAAAAGAAACTGCTCAAGGAT
GTGGAGGCGCTGAGCCAGCGGCTGGAGGAGAAGGTCCTGGCGTATGACAAGCTGGAGAAGACCAAGAACC
GGCTGCAACAAGAACTGGATGACCTGACGGTGGACCTGGACCACCAGCGCCAGATCGTCTCCAACTTGGA
GAAGAAACAGAAGAAGTTCGACCAGCTGTTGGCAGAAGAAAAGGGCATCTCTGCTCGCTATGCAGAAGAG
CGGGACCGGGCTGAAGCTGAGGCCAGAGAGAAAGAAACCAAAGCGCTCTCCCTGGCGCGGGCCCTTGAGG
AGGCCTTGGAGGCGAAGGAGGAATTCGAGAGGCAGAACAAGCAGCTTCGAGCAGACATGGAAGACCTGAT
GAGCTCTAAAGACGATGTGGGGAAGAACGTCCACGAGCTTGAGAAATCCAAGCGAGCCTTGGAGCAGCAG
GTGGAGGAGATGCGGACCCAGCTGGAGGAGCTGGAGGACGAGCTGCAGGCCACTGAGGATGCCAAGCTCC
GCCTGGAAGTCAACATGCAGGCCATGAAGGCCCAGTTTGAGAGGGACCTGCAAACCCGAGATGAGCAGAA
TGAAGAAAAGAAGCGGCTGCTGCTTAAGCAGGTGCGGGAGCTCGAGGCAGAGCTGGAGGATGAGCGGAAA
CAGCGGGCACTGGCTGTGGCGTCAAAGAAGAAGATGGAGATAGACCTGAAGGACCTGGAGGCTCAGATCG
AGGCTGCGAACAAAGCCCGGGATGAAGTGATCAAGCAGCTTCGCAAACTTCAGGCACAGATGAAGGATTA
CCAGCGTGAACTAGAAGAGGCTCGAGCATCTAGAGATGAGATTTTTGCTCAATCCAAAGAAAGTGAAAAG

AAACTGAAGAGTCTAGAAGCAGAAATTCTTCAGCTGCAAGAGGAGCTGGCCTCATCCGAGCGAGCCCGCC
GACACGCAGAGCAGGAGCGAGACGAGCTGGCTGATGAGATCGCCAACAGCGCCTCTGGAAAGTCTGCGCT
GTTGGATGAGAAGCGGCGCCTGGAAGCGCGGATCGCACAGCTGGAAGAGGAGCTGGAGGAGGAGCAGAGC
AACATGGAGCTGCTCAATGACCGCTTCCGCAAGACCACGCTGCAGGTGGACACACTGAACACAGAGCTGG
CAGCAGAGCGCAGCGCTGCCCAGAAGAGTGACAATGCCCGCCAGCAGCTGGAGCGACAAAACAAGGAGCT
GAAGGCCAAGCTGCAGGAGCTGGAGGGGGCAGTCAAGTCCAAGTTCAAGGCTACCATCTCAGCCCTGGAA
GCCAAGATTGGGCAGCTGGAGGAGCAGCTTGAGCAGGAAGCCAAGGAGCGAGCAGCTGCCAACAAACTAG
TCCGTCGAACAGAGAAGAAACTGAAAGAAATCTTCATGCAGGTTGAAGACGAGCGTCGGCATGCGGATCA
GTATAAGGAGCAGATGGAGAAGGCTAATGCCAGGATGAAGCAGCTTAAACGACAGTTGGAAGAGGCTGAG
GAAGAGGCCACACGTGCCAACGCATCTCGGCGTAAACTCCAAAGGGAGCTGGACGACGCCACTGAGGCCA
ATGAAGGCCTGAGCCGCGAGGTCAGCACTCTCAAGAACCGGCTCAGGCGGGGCGGTCCAATCAGCTTTTC
TTCAAGCCGATCTGGCCGGCGCCAGCTGCACATTGAGGGGGCATCGCTAGAGCTGTCAGATGACGACACA
GAAAGTAAGACCAGTGATGTCAATGACACACAGCCACCCCAATCAGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

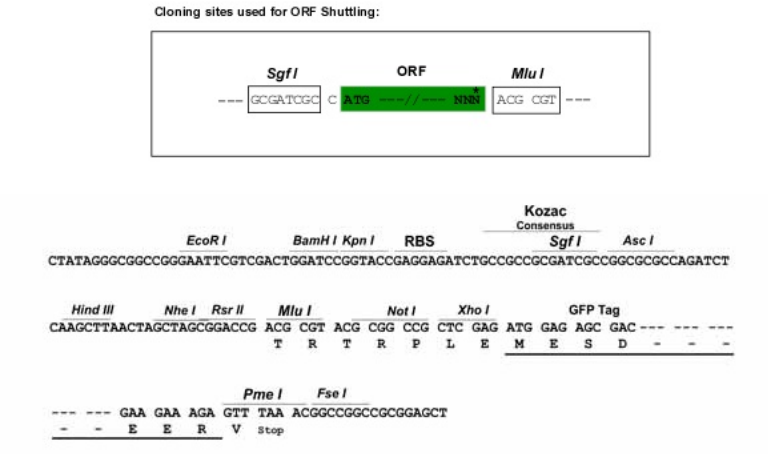
>MG212106 representing NM_175260
Red=Cloning site Green=Tags(s)

MAQRTGLEDPERYLFVDRAVIYNPATQADWTAKKLVWIPSERHGFEAASIKEERGDEVMVELAENGKKAM
VNKDDIQKMNPPKFSKVEDMAELTCLNEASVLHNLKDRYYSGLIYTYSGLFCVVINPYKNLPIYSENIIE
MYRGKKRHEMPPHIYAISESAYRCMLQDREDQSILCTGESGAGKTENTKKVIQYLAHVASSHKGRKDHNI
PGELERQLLQANPILESFGNAKTVKNDNSSRFGKFIRINFDVTGYIVGANIETYLLEKSRAVRQAKDERT
FHIFYQLLSGAGEHLKSDLLLEGFNNYRFLSNGYIPIPGQQDKDNFQETMEAMHIMGFSHEEILSMLKVV
SSVLQFGNISFKKERNTDQASMPENTVAQKLCHLLGMNVMEFTRAILTPRIKVGRDYVQKAQTKEQADFA
VEALAKATYERLFRWLVHRINKALDRTKRQGASFIGILDIAGFEIFELNSFEQLCINYTNEKLQQLFNHT
MFILEQEEYQREGIEWNFIDFGLDLQPCIDLIERPANPPGVLALLDEECWFPKATDKTFVEKLVQEQGSH
SKFQKPRQLKDKADFCIIHYAGKVDYKADEWLMKNMDPLNDNVATLLHQSSDRFVAELWKDVDRIVGLDQ
VTGMTETAFGSAYKTKKGMFRTVGQLYKESLTKLMATLRNTNPNFVRCIIPNHEKRAGKLDPHLVLDQLR
CNGVLEGIRICRQGFPNRIVFQEFRQRYEILTPNAIPKGFMDGKQACERMIRALELDPNLYRIGQSKIFF
RAGVLAHLEEERDLKITDIIIFFQAVCRGYLARKAFAKKQQQLSALKVLQRNCAAYLKLRHWQWWRVFTK
VKPLLQVTRQEEELQAKDEELLKVKEKQTKVEGELEEMERKHQQLLEEKNILAEQLQAETELFAEAEEMR
ARLAAKKQELEEILHDLESRVEEEEERNQILQNEKKKMQAHIQDLEEQLDEEEGARQKLQLEKVTAEAKI
KKMEEEVLLLEDQNSKFIKEKKLMEDRIAECSSQLAEEEEKAKNLAKIRNKQEVMISDLEERLKKEEKTR
QELEKAKRKLDGETTDLQDQIAELQAQVDELKVQLTKKEEELQGALARGDDETLHKNNALKVARELQAQI
AELQEDFESEKASRNKAEKQKRDLSEELEALKTELEDTLDTTAAQQELRTKREQEVAELKKALEDETKNH
EAQIQDMRQRHATALEELSEQLEQAKRFKANLEKNKQGLETDNKELACEVKVLQQVKAESEHKRKKLDAQ
VQELHAKVSEGDRLRVELAEKANKLQNELDNVSTLLEEAEKKGIKFAKDAAGLESQLQDTQELLQEETRQ
KLNLSSRIRQLEEEKNSLQEQQEEEEEARKNLEKQVLALQSQLADTKKKVDDDLGTIESLEEAKKKLLKD
VEALSQRLEEKVLAYDKLEKTKNRLQQELDDLTVDLDHQRQIVSNLEKKQKKFDQLLAEEKGISARYAEE
RDRAEAEAREKETKALSLARALEEALEAKEEFERQNKQLRADMEDLMSSKDDVGKNVHELEKSKRALEQQ
VEEMRTQLEELEDELQATEDAKLRLEVNMQAMKAQFERDLQTRDEQNEEKKRLLLKQVRELEAELEDERK
QRALAVASKKKMEIDLKDLEAQIEAANKARDEVIKQLRKLQAQMKDYQRELEEARASRDEIFAQSKESEK
KLKSLEAEILQLQEELASSERARRHAEQERDELADEIANSASGKSALLDEKRRLEARIAQLEEELEEEQS
NMELLNDRFRKTTLQVDTLNTELAAERSAAQKSDNARQQLERQNKELKAKLQELEGAVKSKFKATISALE
AKIGQLEEQLEQEAKERAAANKLVRRTEKKLKEIFMQVEDERRHADQYKEQMEKANARMKQLKRQLEEAE
EEATRANASRRKLQRELDDATEANEGLSREVSTLKNRLRRGGPISFSSSRSGRRQLHIEGASLELSDDDT
ESKTSDVNDTQPPQSE

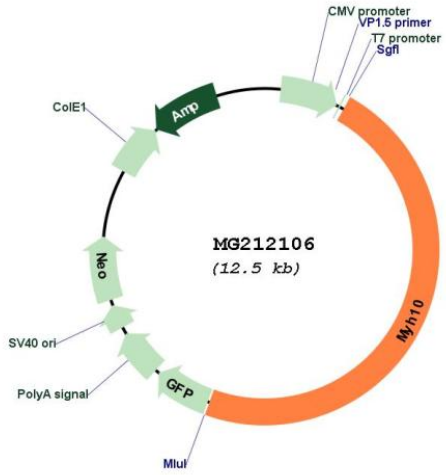
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_175260

ORF Size: 5928 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_175260.2, NP_780469.1
RefSeq Size:	7783 bp
RefSeq ORF:	5931 bp
Locus ID:	77579
UniProt ID:	Q61879
Cytogenetics:	11 41.95 cM
Gene Summary:	Involved with LARP6 in the stabilization of type I collagen mRNAs for CO1A1 and CO1A2. During cell spreading, plays an important role in cytoskeleton reorganization, focal contacts formation (in the central part but not the margins of spreading cells), and lamellipodial extension; this function is mechanically antagonized by MYH9 (By similarity). Cellular myosin that appears to play a role in cytokinesis, cell shape, and specialized functions such as secretion and capping.[UniProtKB/Swiss-Prot Function]