

Product datasheet for **MR226406**

Myh7 (NM_080728) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Myh7 (NM_080728) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Myh7
Synonyms: B-MHC; beta-MHC; Myhc-b; MyHC-l; Myhcb
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR226406 representing NM_080728
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGGATGCAGAGATGGCTGCATTTGGGGCTGCAGCCCCCTTCTGCGGAAGTCTGAGAAGGAGAGGC
 TGGAGGCACAGACCAGGCCCTTTGACCTCAAGAAAGATGTTTTGTGCCCGATGACAAAGAAGAGTTTGT
 CAAGGCCAAGATCGTGTCCCGAGAGGGTGGCAAAGTCACTGCTGAGACGGAGAATGGCAAGACGGTACT
 GTGAAGGAGGACCAGGTGATGCAGCAGAACCCACCCAAGTTCGACAAGATCGAGGACATGGCCATGCTGA
 CCTTCTGCATGAGCCGGCTGTGCTGTACAACCTCAAGGAGCGCTACGCTTCTGGATGATCTATACCTA
 CTGGGCCCTTCTGCGTCACCGTCAACCCCTACAAGTGCTGCCTGTGTACAATGCGGAAGTGGTGGCT
 GCCTACCGGGCAAGAAGAGGAGCGAGGCCCTCCTCACATCTTCTCCATCTCTGACAACGCCTATCAGT
 ACATGCTGACAGATCGGGAGAATCAGTCCATCCTCATCACCGGAGAATCCGGAGCTGGGAAGACTGTCAA
 CACTAAGAGGGTCATCCAATATTTTGTGTTATTGCCGCCATTGGGGACCGCAGCAAGAAGGACCAGACC
 CCAGGCAAGGGTACCCTGGAAGATCAAATCATCCAAGCCAACCCCTGCTCTGGAGGCCTTTGGCAATGCCA
 AGACAGTTCGGAATGACAACCTCTCGATTTGGGAAATTCATCCGAATCCATTTGGGGCAACAGGAAA
 GTTGGCATCTGCAGACATAGAGACCTACCTTCTGGAAAAATCCAGGGTTATTTCCAGCTGAAAGCAGAA
 AGAGATTATCACATTTTCTACCAATCCTGTCTAATAAAAAGCCTGAGCTTCTAGACATGCTGCTGATCA
 CCAACAACCCCTACGATTATGCGTTTCTCTCCCAAGGAGAGACGACTGTGGCCTCATTGATGACTCTGA
 AGAGCTCATGGCCACGGATAGCGCCTTTGACGTGCTGGGCTTCACTCCAGAAGAGAAGAACTCCATTTAC
 AAGCTGACAGGCGCCATCATGCACTTTGAAAACATGAAGTTCAAGCAGAAGCAGCGGGAGGAGCAGGCGG
 AACCAGACGGCACTGAAGAGGCTGACAAATCAGCCTACCTCATGGGGCTGAACTCAGCCGACCTGCTTAA
 GGGGCTGTGCCATCCTAGAGTCAAAGTGGGCAACGAGTACGTACCAAGGGGCAGAATGTCCAGCAGGTG
 TCATACGCCATCGGGCACTGGCCAAGTCAAGTACGAGAAGATGTTCAACTGGATGGTACACGCATCA
 ATGCAACCCCTGGAGACCAAGCAGCCGCGCCAGTACTTCATAGGTGCTCTGGACATTCGCCGCTTTGAGAT
 CTTGATTTCAACAGCTTTGAGCAGCTGTGCATCAACTCACCAATGAGAAGCTGCAGCAGTTCTTCAAC



[View online >](#)

CACCACATGTTCTGCTGGAGCAGGAGGAGTACAAGAAGGAGGGCATTGAGTGGACCTTCATAGACTTCG
 GCATGGACTTGCAGGCTGCATTGACCTCATCGAGAAGCCATGGGCATCATGTCCATCCTTGAGGAGGA
 GTGCATGTTCCCAAGGCCACAGACATGACCTTCAAGGCCAAGCTGTACGACAACCACCTGGGCAAGTCC
 AACAACTCCAGAAGCCTCGAAATGTCAAGGGGAAGCAGGAAGCCACTTCTCTTTGGTCCACTATGCTG
 GCACTGTGGACTACAATATCCTGGGCTGGCTACAGAAGAACAAGGACCCACTCAATGAGACGGTGGTGGG
 TTTGTACCAGAAGTCTCCCTCAAGTGTCTCAGCAATCTATTTGCCAACTATGCTGGAGCTGATGCCCCG
 GCGGCAAAGGCCAAAGGCCAAAGGCAAGGCTCATCCTTTTCAGACCGTGTCTGCTGCACAGAGAAA
 ATCTGAACAAACTTATGACAAACTTGCCTCCACGCACCCTCACTTTGTACGCTGCATCATCCCCAATGA
 GACAAAGTCTCCAGGGGTGATGGACAACCCCTGGTCATGCACCAGCTGCGATGCAATGGCGTGGTGGAG
 GGTATCCGCATCTGCAGGAAGGGCTTCCCAACCCGATTCTCTATGGGGACTTCCGGCAGAGGTATCGCA
 TCCTGAACCCAGCAGCCATCCCTGAGGGCAATTCAATTGATAGCAGGAAAGGGGTGAGAAACTGCTGGG
 CTCCTGGACATTGACCACAACCAATAAAGTTTGGTACACCAAGGTGTTCTTCAAGGCGGGCCTGCTG
 GGGCTGCTGGAGGAGATGCGTGTGAGAGGCTGAGCCGCATCATACCAGAATCCAGGCCAGTCCCAGAG
 GTGTGCTCTCAGAATGGAGTTCAGAAGCTGCTGGAGCGCAGAGACTCCCTGCTGATTATCCAGTGGAA
 CATTAGGGCCTTCATGGGGTCAAGAATTGGCCGTGGATGAAGCTCTACTTCAAGATCAAGCCGCTGCTG
 AAGAGCGCGGAGACGGAGAAGGAGATGGCCACCATGAAGGAGGAGTTGGGCGAGTCAAAGATGCACTAG
 AGAAGTCTGAGGCTCGCCGAAGGAGCTGGAGGAGAAGATGGTGTCCCTGCTGCAGGAGAAGAATGACCT
 GCAGCTCCAAGTGCAGGCGGAACAAGACAACCTTGGCGGATGCAGAGGAGCGCTGTGACCAGCTGATCAAG
 AACAAATCCAGCTGGAGGCCAAGGTGAAGGAGATGACCGAGAGGCTGGAGGACGAGGAGGAGATGAATG
 CCGAGCTCACTGCCAAGAAGCGCAAGCTGGAAGATGAGTGTCTCAGAGCTCAAGCGGGATATCGATGACCT
 GGAGCTGACGCTGGCCAAAGGTGGAGAAGGAAAAGCATGCAACAGAGAACAAGGTGAAAACCTGACAGAG
 GAGATGGCTGGTTTGGATGAGATCATTGTCAAGCTGACAAAGGAGAAGAAAGCTGCAAGAGGCCCAAGTCAAGT
 AGCAGGCTCTGGATGACCTGCAGGCTGAGGAAGACAAGTCAATACTCTGACCAAGGCCAAGGTCAAGT
 GGAGCAGCAGGTGGATGATCTGGAGGGATCCCTGGAGCAGGAGAAGAAGGTGCGCATGGACCTAGAGCGA
 GCCAAGCGGAAGCTGGAGGGAGACCTGAAGCTGACGCAGGAGAGCATCATGGACCTGGAGAATGACAAGC
 AGCAGTTGGATGAGCGACTCAAAAAGAAGGACTTTGAGTTAAATGCACTCAATGCCAGGATTGAGGATGA
 GCAAGCCCTGGGCAGTCACTGCAGAAGAAGCTCAAGGAGCTTCAAGCACGCATCGAGGAGCTGGAGGAG
 GAGCTGGAGGCCGAGCGCACAGCCCGGGCAAGGTGGAGAAGCTGCGCTCTGACCTGTCCCGGAGCTGG
 AGGAGATCAGTAAAAGGCTGGAGGAGGCGAGGCGGGCCACATCCGTGCAGATAGAGATGAACAAGAAGCG
 CGAGGCCGAGTTCAGAAGATGCGGCGGGACCTGGAGGAGGCCACGCTGCAGCACGAGGCCACGGCGGGC
 GCCCTGCGCAAGAAGCATGCCGACAGCTGGCGGAGCTGGGCGAGCAGATCGACAACCTCCAGCGGTGA
 AGCAGAAGCTGGAGAAAGAGAAAAGCGAGTTCAAGCTGGAGCTGGATGAGTCACTCCAAACATGGAGCA
 GATCATCAAGGCCAAGGCTAACCTGGAGAAGATGTGCCGGACCTTGAAGACCAGATGAATGAGCACCGG
 AGCAAGGCCGAGGAGACGCAGCGTTCTGTCAATGACCTCACAGCCAGCGGGCAAGCTGCAGACAGAGA
 ATGGGGAGCTGTCCCGCAGCTGGACGAGAAGGAGGCTCTGATCTCTCAGCTAACCCGAGGCAAGCTCAC
 ATATACACAGCAGCTGGAGGACCTCAAGAGGCAACTGGAGGAGGAGGTCAAGGCCAAGAACGCGCTGGCC
 CACGCACTGCAGTCAAGCAGGATGATTGTGACCTGCTGAGGGAACAGTATGAGGAGGAGACAGAGGCCA
 AGGCTGAGCTACAGCGAGTCTGTCCAAGGCCAATTCAAGGTTGGCCAGTGGAGGACCAAGTATGAGAC
 GGATGCCATACAGAGGACAGAGGAGCTGGAGGAAGCCAAGAAGAAGCTGGCTCAGAGGCTGCAGGATGCA
 GAGGAGGCAAGTGGAGGCTGTCAATGCCAAGTGTCTCTCTGGAGAAGACCAAGCACAGGCTGCAGAATG
 AGATCGAGGACCTGATGGTGGACGTGGAGCGCTCCAATGCCGCCCGCAGCCCTGGACAAGAAGCAGAG
 GAACTTTGACAAGATCCTGGCTGAGTGGAAAGCAGAAGTATGAGGAGTTCGAGTCAAGGAGTCTTCC
 CAGAAGGAGGCGCTCCCTGAGCACAGAGCTCTTCAAGCTCAAGAACGCCTATGAGGAGTCTCTGGAGC
 ACCTAGAGACCTTCAAGCGGGAGAACAAGAACCTCCAGGAGGAGATCTCAGACCTGACTGAGCAGCTGGG
 CTCACCGGGGAAGAGCATCCATGAGCTGGAGAAGATCCGAAAGCAACTGGAGGCCGAGAAGCTGGAGCTG
 CAGTCGGCCCTGGAGGAGCTGAGGCTCCCTGGAGCACGAGGAGGCAAGATCTCCGCGCCAGCTAG
 AGTTCAACCAGATCAAGGCAGAGATTGAAAGGAAGCTGGCAGAGAAGGATGAGGAGATGGAGCAGGCCAA
 GCGCAACCACCTGCGGATGGTGGACTCCCTGCAGACCTCCCTGGATGCGGAGACACGCAGCCGAATGAG
 GCCCTGCGGGTGAAGAAGAAGATGGAGGGCGACCTCAACGAGATGGAGATCCAGCTCAGCCATGCCAAC
 GTATGGCTGCTGAGGCCAGAAAACAAGTGAAGAGCCTCCAGAGTCTGCTGAAGGACACTCAAATCCAGCT
 GGATGATGCTGTCCGTGCCAATGACGACCTGAAAGAGAACATCGCCATCGTGAACGGCGCAACAACCTG
 CTCAGGCGGAGCTGGAGGAGCTTCGGCTGTGGTGGAGCAGACGGAGCGGTCTCGGAAGCTGGCAGAGC

AGGAGCTGATTGAGACCAGCGAGCGGGTGCAGCTGCTGCACTCGCAGAACCAGCCTCATCAACCAGAA
 GAAGAAGATGGATGCAGACCTATCCCAGCTCCAGACAGAAGTAGAGGAGGCAGTGCAGGAGTGTAGGAAC
 GCAGAGGAGAAGGCCAAGAAGGCTATCACAGATGCCGCCATGATGGCTGAGGAGCTGAAGAAGGAGCAGG
 ACACCAGCGCCCACCTGGAGCGCATGAAGAAGAACATGGAGCAGACCATCAAGGACTTGCAGCACCCTCT
 GGACGAGGCAGAGCAGATCGCCCTCAAGGGCGCAAGAAGCAGCTGCAGAAGCTGGAGGCCCGGGTCCGG
 GAGCTGGAGAATGAGCTGGAGGCTGAGCAAAAGCGCAATGCAGAGTCAGTGAAGGGCATGAGGAAGAGTG
 AGCGGCGCATCAAGGAGCTCACCTACCAGACAGAGGAAGACAGGAAGAACCTACTGCGGCTGCAGGACCT
 GGTGGACAAGCTGCAGCTGAAGGTGAAGGCTACAAGCGCCAGGCTGAGGAGGCGGAGGAGCAGGCCAAC
 ACCAACCTGTCCAAGTTCGCAAGGTGCAGCACGAGCTGGATGAGGCGGAGGAGGGCGGACATCGCCG
 AGTCCCAGGTCAACAAGCTGCGGGCCAAGAGCCGGGACATTGGTGCCAAGGGCTGAATGAGGAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR226406 representing NM_080728
 Red=Cloning site Green=Tags(s)

MADAEMAAFGAAAPFLRKSEKERLEAQRPFDLKDDVFPDDKEEFVKAKIVSREGGKVT AETENKTVT
 VKEDQVMQNPFPKFKIEDMAMLTFLHEPAVLNLYKERYASWMIYTYSGLFCVTVNPKWLPVYNAEVVA
 AYRGGKRSEAPPHIFSIDNAYQYMLTDRENQSILITGESGAGKTVNTRKVIQYFAVIAAIGDRSKKDT
 PGKGTLEDQIIQANPALEAFGNAKTVRNDNSSRFKGFIRIHFAGTGKLASADIETYLLEKSRVIFQLKAE
 RDYHIFYQILSNKKPELLDMLLITNPNYDYAFISQGETTVASIDDSEELMATDSAFDVLGFTPEEKNSIY
 KLTGAIMHFGNMKFKQKQREEQAE PDGTEEADKSAYLMGLNSADLLKGLCHPRVKVGN EYVTKGQNVQV
 SYAIGALAKSVYEKMFNMVTRINATLETQPRQYF IGVLDIAGFEIFDFNSFEQLCINFTEK LQQFFN
 HHMFVLEQEEYKKEGIEWTFIDFGMDLQACIDLIEKPMGIMSILEEECMFPKATDMTFKALYDNH LGKS
 NNFQKPRNVKQKQEAHFSLVHYAGTV DYNILGWLQKNKDPLNETVVGLYQKSSKLLSNLFANYAGADAP
 ADKGGKAKKGGSSFTVSALHRENLNKLMTNLRSTHHPFVRCIIPNETKSPGVMNDPLVMHQLRCNGVLE
 GIRICRKGFPNRILYGD FRQRYILNPAAIPEGQFIDSRKGAEKLLGSLDIDHNQYKFGHTKVFFKAGLL
 GLLLEEMRDERLSRIITRIQAQSRGVL SRMEFKLLERRDLSLIIQWNIRAFMGVKNWPWMLYFKIKPLL
 KSAETEKEMATMKEEFGRVKDALEKSEARRKELEEKMSVLLQEKNDLQLQVQAEQDNLADAEERCDQLIK
 NKIQLEAKVKEMTERLEDEEEMNAELTAKKRKLEDECESELKRDIDDELTLAKVEKEHATENKVKNLTE
 EMAGLDEIIVKLTKEKKALQEAHQALDDLQAEEDKVNTLTKAKVKLEQQVDDLEGSLEQEKKVRMDLER
 AKRKLEGLKLTQESIMDLENDKQQLDERLKKKDFELNALNARIEDEQALGSQKQKLELQARIEELEE
 ELEAERTARAKVEKLRSDLSRELEEISERLEEAGGATSVQIEMNKKREAEFQKMRRL EEA TLQHEATAA
 ALRKKHADSV AELGEQIDNLQRVKQKLEKESEFKLELDDVTSNMEQIIKAKANLEKMCRTLEDQMNEHR
 SKAEETQRSVNDLTSQRAKLQTENGELSRQLDEKEALISQLTRGKLYTQQLEDLKRQLEEEVKAKNALA
 HALQ SARHDCDLLREQYEEETEAKAELQRVLSKANSEVAQWRTKYETDAIQRTEEEAAKKLAQRLQDA
 EEAVEAVNAKCSSLEKTKHRLQNEIEDLMVDVERSNAAAAALDKQRNFDKILAEWKQKYEE SQSELESS
 QKEARSLSTELFKLNAYEESLEHLETFKRENKLNQEEISDLTEQLGSTGKSIHELEKIRKQLEAEKLEL
 QSAL EEAASLEHEEGKILRAQLEFNQIKAEIERKLAEKDEEMEQAQRNHLRMVDSLQTSLDAETR SRNE
 ALRVKMMEGDLNEMEIQLSHANRMAEAQKQVKSLSLLKDTQIQLDDAVRANDDLKENIAIVERRNLL
 LQAELEELRAVVEQTERSRLAEQELIETSERVQLLHSQNTSLINQKKMDADLSQLQTEVEEAVQECRN
 AEEKAKKAITDAAMMAEELKKEQD TSAHLERMKNMEQTIKDLQHRLEAEQIALKGGKQLQKLEARVR
 ELENELEAEQKRNAESVKGMRKSERRIKELTYQTEEDRKNLLRLQDLVDKQLQKVKAYKRQAEAE EQAN
 TNL SKFRVKVQHELDEAEERADIAESQVKNLRAKSRDIGAKGLNEE

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_080728

ORF Size: 5805 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_080728.3](#)

RefSeq Size: 6054 bp

RefSeq ORF: 5808 bp

Locus ID: 140781

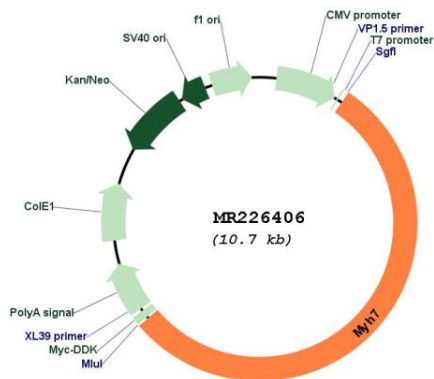
UniProt ID: [Q91Z83](#)

Cytogenetics: 14 28.01 cM

MW: 222.9 kDa

Gene Summary: Myosins are actin-based motor molecules with ATPase activity essential for muscle contraction. Forms regular bipolar thick filaments that, together with actin thin filaments, constitute the fundamental contractile unit of skeletal and cardiac muscle.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR226406