

Product datasheet for MR201346

Myl2 (NM_010861) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Myl2 (NM_010861) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Myl2
Synonyms: MLC-2; MLC-2s/v; MLC-2v; Mlc2v; Mylpc
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR201346 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGCACCAAAGAAAGCCAAGAAGCGGATAGAAGGCGGGAGCTCCAACGTGTTCTCCATGTTTGAGCAGA
 CCCAGATCCAGGAGTTCAAGGAAGCCTTACAATCATGGACCAGAACAGAGACGGCTTCATCGACAAGAA
 TGACCTAAGGGACACATTTGCTGCCCTAGGACGAGTGAACGTGAAAAATGAAGAGATCGATGAAATGATC
 AAAGAGGCTCCAGGTCCAATTACTTCACCGTGTTCCTCAGGATGTTGGGGAGAAAATTAAGGGGCTG
 ATCCTGAAGAGACCATTCTCAACGCATTCAAGGTGTTTGATCCCGAGGGCAAAGGGTCACTGAAGGCTGA
 CTATGTCCGGGAGATGCTGACCACACAAGCAGGGAGGTTCTCAAAGAGGAGATCGACCAGATGTTTCGCA
 GCCTTTCCCCTGACGTCACCGCAATCTTGATTATAAGAATTTGGTCCCATCATTACCCACGGAGAAG
 AGAAGGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR201346 protein sequence
 Red=Cloning site Green=Tags(s)

MAPKKAKKRIEGGSSNVFSMFEQTQIQEFKEAFTIMDQNRDGFIDKNDLRDTFAALGRVNVKNEEIDEMI
 KEAPGPINFTVFLTMFGEKLGADPEETILNAFKVFDPEGKGLKADYVREMLTTQAGRFSEEIDQMFA
 AFPPDVTGNLDYKNLVHIITHGEEKD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI



RefSeq Size: 633 bp

RefSeq ORF: 501 bp

Locus ID: 17906

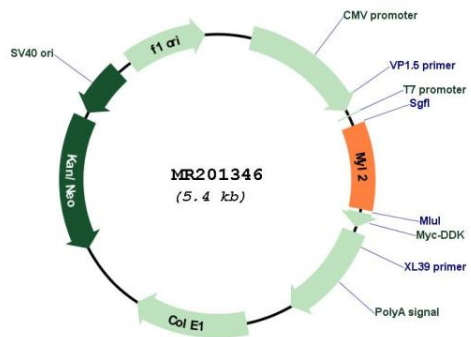
UniProt ID: [P51667](#)

Cytogenetics: 5 F

MW: 18.8 kDa

Gene Summary: Contractile protein that plays a role in heart development and function (PubMed:10409661). Following phosphorylation, plays a role in cross-bridge cycling kinetics and cardiac muscle contraction by increasing myosin lever arm stiffness and promoting myosin head diffusion; as a consequence of the increase in maximum contraction force and calcium sensitivity of contraction force. These events altogether slow down myosin kinetics and prolong duty cycle resulting in accumulated myosins being cooperatively recruited to actin binding sites to sustain thin filament activation as a means to fine-tune myofilament calcium sensitivity to force (By similarity) (PubMed:22426213, PubMed:16908724, PubMed:10409661). During cardiogenesis plays an early role in cardiac contractility by promoting cardiac myofibril assembly (PubMed:9422794).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR201346