

## Product datasheet for **SC307402**

### **MYLK3 (NM\_182493) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MYLK3 (NM_182493) Human Untagged Clone
Tag:	Tag Free
Symbol:	MYLK3
Synonyms:	caMLCK; MLCK; MLCK2
Vector:	<u>pCMV6 series</u>



[View online »](#)

**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_182493, the custom clone sequence may differ by one or more nucleotides

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ATGTCAGGAACCTCCAAGGAGAGTCTGGGGCATGGGGGCTGCCAGGGTTGGGCAAGACC
TGCTTAACAACCATGGACACAAAGCTGAACATGCTGAACGAGAAGGTGGACCAGCTCCTG
CACTTCCAAGAAGATGTCACAGAGAAGTTGCAGAGCATGTGCCGAGACATGGGCCACCTG
GAGCGGGGCTGCACAGGCTGGAGGCTCCCGGGCACCAGGGCCCGGGCGGGGCTGATGGG
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CAGCAGGATGCGGCCAGCACGGTGGCAGGCTGGAGGCCCTCTTCAAGATGGTGGCTGCG
GTGGACAGGGCCATCGCTTTGGTGGGGCCACGTTCCAGAAATCAAAGGTGGCGATTTTC
CTCATGCAGGGCGTGTGCCCTGGAGGAGAGGCAGCCAGGTGACAGCCCTGAGGAGAAT
AAAGAGCGAGTGAAGAAGAGGGAGGAAAACAAAGCATGTGCTGAGCACCAGTGGGGTG
CAGTCTGATGCCAGGGAGCTGGGAAGAGAGCCAGAAGGCGGACGTGCTGGAGGGGACA
GCGGAGAGGCTGCCCCCATCAGAGCGTCAGGGCTGGGAGCTGACCCCGCCAGGCAGTG
GTCTACCGGGCCAGGGAGATGGTGTCTTGGCCAGCCAGGCATTCCCTGGCCACCTG
CCCCTGCCCAAAGGTGAAGCCAAGGCTCTGAGACACCCAGCGAGAACCTCAGGACT
GGCCTGGAATTGGCTCCAGCACCCGGCAGGGTCAATGTGGTCTCCCCGAGCTGGAGGTT
GCACCAGGTGCAGGACAAGGAGCATCGTCCAGCAGGCCTGACCCTGAGCCCTTAGAGGAA
GGCAGCAGGCTGACTCCAGGGCCTGGCCCTCAGTGCCAGGGCCTCCAGGGCTGCCAGCC
CAGGCCAGGGCAACCCACAGTGGTGGAGAAACCTCCAAGGATCTCCATCCACATACAA
GAGATGGATACTCCTGGGGAGATGCTGATGACAGGCAGGGGCAGCCTTGGACCCACCTC
ACCACAGAGGCTCCAGCAGCTGCCAGCCAGGCAAGCAGGGCCCACTGGGACCGGGCGC
TGCTTCCAAGCCCTGGGACTGAGCCCGGAGAACAGACCCTGAAGGAGCCAGAGAGCTC
TCCCGCTGCAGGAGAGCAGCAGCCCGGGGAGTGAAGGCAGAGGAGGACAAAGGGCT
GGGGCCGAGCCTGGCACGAGACCAAGCTTGGCCAGGAGTGACGACAATGACACAGGTT
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GACTGTGCAGCCAGGGCTCCGGTGAAGAGCTGAAGCAGTAAGGAGGATGCCCCAGGCGCC
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GTAGTGAGCGTCAAGGAGACCTCCATCTCTGCGGGTTACGAGGTGTCCAGCAGCAAGTC
TTGGGAGGGGTCGGTTTGGCCAGGTCCACAGGTGCACAGAGAAGTCCACAGGCCTCCCA
CTGGCTGCCAAGATCATCAAAGTGAAGAGCGCCAAGGACCGGGAGGACGTGAAGAACGAG
ATCAACATCATGAACCAGCTCAGCCACGTGAACCTGATCCAGCTCTATGACGCCTTCGAG
AGCAAGCAGAGCTGCACCCTTGTATGGAGTACGTGGACGGGGGTGAGCTCTTCGACCGG
ATCACAGATGAGAAGTACCACCTGACTGAGCTGGATGTGGTCTGTTCACCAGGCAGATC
TGTGAGGGTGTGCATTACCTGCACCAGCACTACATCCTGCACCTGGACCTCAAGCCGGAG
AACATATTGTGCGTCAATCAGACAGGACATCAAATTAAGATCATTGACTTTGGGCTGGCC
AGAAGGTACAAGCCTCGAGAGAAGTGAAGGTGAACCTTCGGCACTCCTGAGTTCCTGGCC
CCAGAAGTCGTCATTAAGTGTGCTCATTCCCCACAGACATGTGGAGTGTGGGAGTC
ATCACCTACATGCTACTCAGTGGCTTGTCCCCATTTCTAGGGGAAACAGATGCAGAGACC
ATGAATTTTCATTGTAACCTGTAGCTGGGATTTTGTGCTGACACCTTTGAAGGGCTCTCG
GAGGAGGCCAAGGACTTTGTTTCCCGGTTGCTGGTCAAAGAGAAGAGCTGCAGAATGAGT
GCCACACAGTGCCTGAAACACGAGTGGCTGAATAATTTGCCTGCCAAAGCTTCAAGATCC
AAAACCTGCTCAAATCCCAACTACTGCTGCAGAAATACATAGCTCAAAGAAAATGGAAG
AAACATTTCTATGTGGTACTGCTGCCAACAGGTTAAGGAAATTTCCAACCTTCTCCCTAA

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**Restriction Sites:** Please inquire

**ACCN:** NM\_182493

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

<b>OTI Annotation:</b>	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_182493.1</a></u> , <u><a href="#">NP_872299.1</a></u>
<b>RefSeq Size:</b>	2760 bp
<b>RefSeq ORF:</b>	2388 bp
<b>Locus ID:</b>	91807
<b>UniProt ID:</b>	<u><a href="#">Q32MK0</a></u>
<b>Cytogenetics:</b>	16q11.2
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	Calcium signaling pathway, Focal adhesion, Regulation of actin cytoskeleton, Vascular smooth muscle contraction
<b>Gene Summary:</b>	<p>Phosphorylation of cardiac myosin heavy chains (see MYH7B, MIM 609928) and light chains (see MYL2, MIM 160781) by a kinase, such as MYLK3, potentiates the force and rate of cross-bridge recruitment in cardiac myocytes (Chan et al., 2008 [PubMed 18202317]).[supplied by OMIM, Jul 2008]</p> <p>Transcript Variant: This variant (1) represents the longer transcript and encodes the longer protein (isoform 1).</p>