

## Product datasheet for RC215976

### Myosin light chain kinase (MYLK) (NM\_053025) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Myosin light chain kinase (MYLK) (NM_053025) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Myosin light chain kinase
Synonyms:	AAT7; KRP; MLCK; MLCK1; MLCK108; MLCK210; MMIHS; MMIHS1; MSTP083; MYLK1; smMLCK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC215976 representing NM_053025 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
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ATGGGGGATGTGAAGCTGGTTGCCTCGTCACACATTTCCAAAACCTCCCTCAGTGTGGATCCCTCAAGAG  
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AACGCCCAAGGCCAGGTGTCCTGTAGCTGGACCCTCCAAGTGAAAGGCTTGCCGTGATGGAGGTGGCCC  
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**Protein Sequence:**

>RC215976 representing NM\_053025

Red=Cloning site Green=Tags(s)

MGDVKLVASSHISKTSLVDPSPVDSMPLTEAPAFILPPRNLCIKEGATAKFEGRVRYGPEPQVTWHRNG  
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 DEAFDEISDDAKDFISNLLKKDMKNRLDCTQCLQHPWLMKDTKNMEAKKLSKDRMKKYMARRKWKQTN  
 VRAIGRLSSMAMISGLSGRKSSTGSPTSPLNAEKLESEDSVQAFLEAVAEKPHVKPYFSKTIIRDLEVE  
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/ja1917\\_d08.zip](https://cdn.origene.com/chromatograms/ja1917_d08.zip)

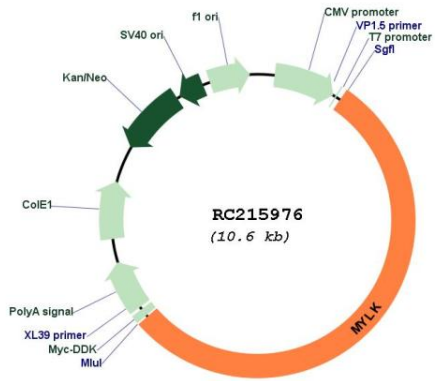
**Restriction Sites:**

Sgfl-MluI



<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 Size:</b>	7852 bp
<b>RefSeq ORF:</b>	5745 bp
<b>Locus ID:</b>	4638
<b>UniProt ID:</b>	<a href="#">Q15746</a>
<b>Cytogenetics:</b>	3q21.1
<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>MW:</b>	210.7 kDa
<b>Gene Summary:</b>	<p>This gene, a muscle member of the immunoglobulin gene superfamily, encodes myosin light chain kinase which is a calcium/calmodulin dependent enzyme. This kinase phosphorylates myosin regulatory light chains to facilitate myosin interaction with actin filaments to produce contractile activity. This gene encodes both smooth muscle and nonmuscle isoforms. In addition, using a separate promoter in an intron in the 3' region, it encodes telokin, a small protein identical in sequence to the C-terminus of myosin light chain kinase, that is independently expressed in smooth muscle and functions to stabilize unphosphorylated myosin filaments. A pseudogene is located on the p arm of chromosome 3. Four transcript variants that produce four isoforms of the calcium/calmodulin dependent enzyme have been identified as well as two transcripts that produce two isoforms of telokin. Additional variants have been identified but lack full length transcripts. [provided by RefSeq, Jul 2008]</p>

Product images:



Circular map for RC215976