

Product datasheet for TP318513

Myosin light chain kinase (MYLK) (NM_053031) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human myosin light chain kinase (MYLK), transcript variant 7, 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC218513 representing NM_053031 Red=Cloning site Green=Tags(s)

MAMISGLSGRKSSTGSPTSPLNAEKLESEEDVSQAFLEAVAEKPHVKPYFSKTIRDLEWEGSAARFDC
 KIEGYPDPEVWFKDDQSIRESRHFQIDYDEDGNCSLIISDVCGDDDDAKYTCKAVNSLGEATCTAELIVE
 TMEEGEGEGEEEE

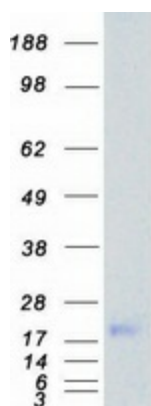
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	16.7 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u>NP_444259</u>
Locus ID:	4638
UniProt ID:	<u>Q15746</u>
RefSeq Size:	2676


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Cytogenetics:	3q21.1
RefSeq ORF:	462
Synonyms:	AAT7; KRP; MLCK; MLCK1; MLCK108; MLCK210; MMIHS; MMIHS1; MSTP083; MYLK1; smMLCK
Summary:	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]
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Calcium signaling pathway, Focal adhesion, Regulation of actin cytoskeleton, Vascular smooth muscle contraction

Product images:



Coomassie blue staining of purified MYLK protein (Cat# TP318513). The protein was produced from HEK293T cells transfected with MYLK cDNA clone (Cat# [RC218513]) using MegaTran 2.0 (Cat# [TT210002]).