

Recombinant Human MYLK protein, His & GST-tagged

Cat. No. MYLK-1509H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human MYLK aa. (Phe1661~Asp1877 (Accession # Q15746)) fused with N-terminal His & GST tag was produced in E. coli cells.
Species	Human
Source	E.coli
ProteinLength	Phe1661~Asp1877
Description	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.
Form	Freeze-dried powder
Molecular Mass	Predicted Molecular Mass: 54.7kDa.

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Endotoxin	<1.0EU per 1g (determined by the LAL method).
Purity	>95%
Characteristic	The isoelectric point is 4.8.
Applications	SDS-PAGE; WB; ELISA; IP.
Stability	The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.
Storage buffer	Supplied as lyophilized form in 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% sarcosyl, 5% trehalose, and preservative.
Reconstitution	Reconstitute in sterile ddH2O.
GENE INFORMATION	
Gene Name	MYLK myosin light chain kinase [Homo sapiens (human)]
Official Symbol	MYLK
Synonyms	KRP; AAT7; MLCK; MLCK1; MYLK1; smMLCK; MLCK108; MLCK210; MSTP083; kinase-related protein; myosin, light polypeptide kinase; smooth muscle myosin light chain kinase; telokin; myosin light chain kinase, smooth muscle

Gene ID	4638
mRNA Refseq	NM_001321309.1
Protein Refseq	NP_001308238.1
UniProt ID	Q15746

SDS-PAGE

