

Recombinant Human MYLK Protein, Myc/DDK-tagged, C13 and N15-labeled

Cat. No. MYLK-4858H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	MYLK MS Standard C13 and N15-labeled recombinant protein (NP_444259) with a C-terminal MYC/DDK tag, was expressed in HEK293 cells.
Species	Human
Source	HEK293
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.
Molecular Mass	16.7 kDa
AA Sequence	MAMISGLSGRKSSTGSPTSPLNAEKLESEEDVSQAFLEAVAEKPHVKPYFSKTIRD

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

LEVVEGSAARFDCKIEGYDPDEVVWFKDDQSIRESRHFQIDYDEDGNCSLIISDVCG
DDDAKYTCKAVNSLGEATCTAELIVETMEEGEGEGEEEEETRTRPLEQKLISEEDLA
ANDILDYKDDDDKV

Purity > 80% as determined by SDS-PAGE and Coomassie blue staining

Stability Stable for 3 months from receipt of products under proper storage and handling conditions.

Storage Store at -80 centigrade. Avoid repeated freeze-thaw cycles.

Concentration 50 µg/mL as determined by BCA

Storage Buffer 100 mM glycine, 25 mM Tris-HCl, pH 7.3.

GENE INFORMATION

Gene Name MYLK myosin light chain kinase [Homo sapiens (human)]

Official Symbol MYLK

Synonyms MYLK; myosin light chain kinase; myosin, light polypeptide kinase; myosin light chain kinase, smooth muscle; MLCK; MLCK1; MYLK1; smMLCK; smooth muscle myosin light chain kinase; telokin; kinase-related protein; KRP; AAT7; MLCK108; MLCK210; MSTP083; FLJ12216; DKFZp686l10125;

Gene ID 4638

mRNA Refseq NM_053031

Protein Refseq NP_444259

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

MIM 600922

UniProt ID Q15746

SDS-PAGE



Tel: 1-631-559-9269 1-516-512-3133

Email: info@creative-biomart.com Fax: 1-631-938-8127

45-1 Ramsey Road, Shirley, NY 11967, USA