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	MAMISGLSGRKSSTGSPTSPLNAEKLESEEDVSQAFLEAVAEEKPHVKPYFSKTIRD

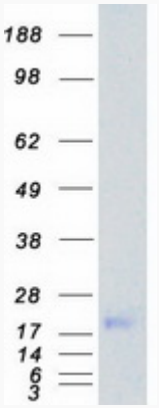
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	LEVVEGSAARFDCKIEGYPDPEVVWFKDDQSIRESRHFQIDYDEDGNCSLIISDVCG 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; DKFZp686I10125;
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