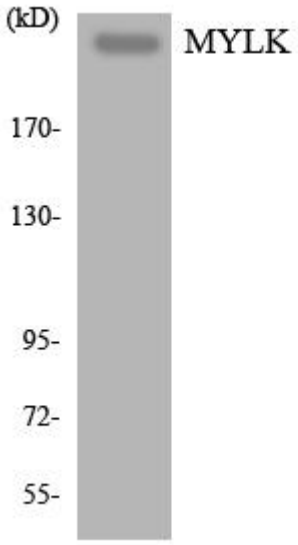
MYLK Monoclonal Antibody

Catalog No	YP-mAb-14869
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	MYLK
Protein Name	Myosin light chain kinase smooth muscle
Immunogen	The antiserum was produced against synthesized peptide derived from human MYLK. AA range:1701-1750
Specificity	MYLK Monoclonal Antibody detects endogenous levels of MYLK protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	MYLK; MLCK; MLCK1; MYLK1; Myosin light chain kinase; smooth muscle; MLCK; smMLCK; Kinase-related protein; KRP; Telokin
Observed Band	200kD
Cell Pathway	Cytoplasm . Cell projection, lamellipodium . Cleavage furrow . Cytoplasm, cytoskeleton, stress fiber . Localized to stress fibers during interphase and to the cleavage furrow during mitosis. .
Tissue Specificity	Smooth muscle and non-muscle isozymes are expressed in a wide variety of adult and fetal tissues and in cultured endothelium with qualitative expression appearing to be neither tissue- nor development-specific. Non-muscle isoform 2 is the dominant splice variant expressed in various tissues. Telokin has been found in a wide variety of adult and fetal tissues. Accumulates in well differentiated enterocytes of the intestinal epithelium in response to tumor necrosis factor (TNF).
Function	alternative products:Additional isoforms seem to exist,catalytic activity:ATP + [myosin light-chain] = ADP + [myosin light-chain] phosphate.,cofactor:Calcium.,cofactor:Magnesium.,enzyme regulation:Isoform 1 is activated by phosphorylation on Tyr-464 and Tyr-471. Isoforms which lack these tyrosine residues are not regulated in this way. All catalytically active isoforms require binding to calcium and calmodulin for activation.,function:Calcium/calmodulin-dependent enzyme implicated in smooth muscle contraction via phosphorylation of myosin light chains (MLC). Implicated in

	the regulation of endothelial as well as vascular permeability. In the nervous system it has been shown to control the growth initiation of astrocytic processes in culture and to participate in transmitter release at synapses formed between cultured sympathetic ganglion cells. Critical participant in signaling sequences
Background	myosin light chain kinase(MYLK) Homo sapiens 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
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using MYLK Monoclonal Antibody