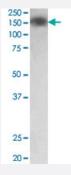


MYLK polyclonal antibody

Catalog # PAB24595 Size 100 ug

Applications



Western Blot (Tissue lysate)

MYLK polyclonal antibody (Cat # PAB24595) (0.03 ug/mL) staining of human colon lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat polyclonal antibody raised against synthetic peptide of MYLK.
A synthetic peptide corresponding to internal region of human MYLK.
C-KDTKNMEAKKLSKD
Goat
150
Human
This antibody is expected to recognise all reported isoforms (NP_444253.3; NP_444254.3; NP_444255.3 and NP_444256.3).
Liquid
Antigen affinity purification
ELISA (1:8000) Western Blot (0.01-0.03 ug/mL) The optimal working dilution should be determined by the end user.



Product Information

Storage Buffer	In 0.5 mg/mL Tris saline, pH 7.3 (0.02% sodium azide, 0.5% BSA)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

Western Blot (Tissue lysate)

MYLK polyclonal antibody (Cat # PAB24595) (0.03 ug/mL) staining of human colon lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Enzyme-linked Immunoabsorbent Assay

F (0 ID	4000
Entrez GenelD	<u>4638</u>
Protein Accession#	NP_444253.3;NP_444254.3;NP_444255.3;NP_444256.3
Gene Name	MYLK
Gene Alias	DKFZp686l10125, FLJ12216, KRP, MLCK, MLCK1, MLCK108, MLCK210, MSTP083, MYLK1, smMLCK
Gene Description	myosin light chain kinase
Omim ID	600922
Gene Ontology	<u>Hyperlink</u>
Gene Summary	This gene, a muscle member of the immunoglobulin gene superfamily, encodes myosin light chair 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 unctions 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
Other Designations	OTTHUMP00000180642 OTTHUMP00000180643 myosin, light polypeptide kinase smooth mus cle myosin light chain kinase



Pathway

- Calcium signaling pathway
- Focal adhesion
- Regulation of actin cytoskeleton
- Vascular smooth muscle contraction

Disease

- Asthma
- Cardiovascular Diseases
- Coronary Artery Disease
- Critical Illness
- Diabetes Mellitus
- Edema
- Genetic Predisposition to Disease
- Heart Defects
- Hypertension
- Kidney Failure
- Puerperal Disorders
- Respiratory Distress Syndrome
- Rhabdomyolysis
- Sepsis
- Streptococcal Infections
- Wounds and Injuries