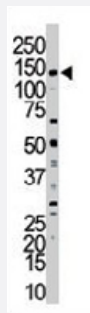


# MYLK polyclonal antibody

Catalog # PAB3182

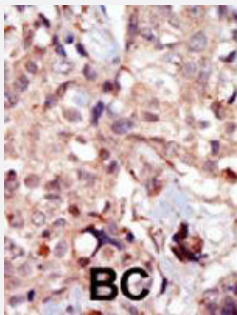
Size 400 uL

## Applications



### Western Blot (Tissue lysate)

Western blot analysis of MYLK polyclonal antibody (Cat # PAB3182) in mouse brain tissue lysate. MYLK (Arrow) was detected using purified polyclonal antibody. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.



### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human cancer tissue reacted with MYLK polyclonal antibody (Cat # PAB3182), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma.

## Specification

<b>Product Description</b>	Rabbit polyclonal antibody raised against synthetic peptide of MYLK.
<b>Immunogen</b>	A synthetic peptide (conjugated with KLH) corresponding to amino acids 908-938 at N-terminus of human MYLK.
<b>Host</b>	Rabbit
<b>Reactivity</b>	Human, Mouse
<b>Form</b>	Liquid
<b>Purification</b>	Protein G purification

<b>Recommend Usage</b>	Western Blot (1:1000) Immunohistochemistry (1:50-100) The optimal working dilution should be determined by the end user.
<b>Storage Buffer</b>	In PBS (0.09% sodium azide)
<b>Storage Instruction</b>	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
<b>Note</b>	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

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## Gene Info — MYLK

<b>Entrez GeneID</b>	<a href="#">4638</a>
<b>Protein Accession#</b>	<a href="#">Q9C0L5</a>
<b>Gene Name</b>	MYLK
<b>Gene Alias</b>	DKFZp686l10125, FLJ12216, KRP, MLCK, MLCK1, MLCK108, MLCK210, MSTP083, MYLK1, smMLCK
<b>Gene Description</b>	myosin light chain kinase
<b>Omim ID</b>	<a href="#">600922</a>
<b>Gene Ontology</b>	<a href="#">Hyperlink</a>

## Gene Summary

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. [provided by RefSeq]

## Other Designations

OTTHUMP00000180642|OTTHUMP00000180643|myosin, light polypeptide kinase|smooth muscle myosin light chain kinase

## Publication Reference

- [Analysis of the kinase-related protein gene found at human chromosome 3q21 in a multi-gene cluster: organization, expression, alternative splicing, and polymorphic marker.](#)

D M Watterson, J P Schavocky, L Guo, C Weiss, A Chlenski, V P Shirinsky, L J Van Eldik, J Haiech.  
Journal of Cellular Biochemistry 1999 Dec; 75(3):481.

Application: IHC-P, Human, Human heart

- [Myosin light chain kinase in endothelium: molecular cloning and regulation.](#)

Garcia JG, Lazar V, Gilbert-McClain LI, Gallagher PJ, Verin AD.  
American Journal of Respiratory Cell and Molecular Biology 1997 May; 13(4):489.

Application: IP, WB-Ce, Bovine, Human, Bovine pulmonary artery endothelial cells, HUVECs

## 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](#)