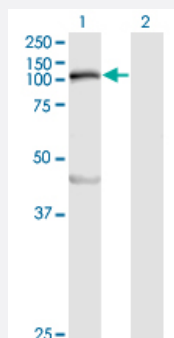


MYLK monoclonal antibody (M01), clone 1D1

Catalog # H00004638-M01

Size 100 ug

Applications

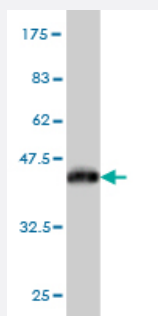


Western Blot (Transfected lysate)

Western Blot analysis of MYLK expression in transfected 293T cell line by MYLK monoclonal antibody (M01), clone 1D1.

Lane 1: MYLK transfected lysate (110.2 KDa).

Lane 2: Non-transfected lysate.



Western Blot detection against Immunogen (36.63 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant MYLK.
Immunogen	MYLK (NP_444253, 1710 a.a. ~ 1809 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	CTQCLQHPWLMKDTKNMEAKKLSKDRMKKYMARRKWQKTGNVRAIGRLSSMAMISGLSGRKS STGSPTSPLNAEKLSEEDVSQAFLEAVAEKPHVKP
Host	Mouse
Reactivity	Human
Isotype	IgG1 Kappa

Quality Control Testing

Antibody Reactive Against Recombinant Protein.
Western Blot detection against Immunogen (36.63 KDa) .

Storage Buffer

In 1x PBS, pH 7.4

Storage Instruction

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Transfected lysate)

Western Blot analysis of MYLK expression in transfected 293T cell line by MYLK monoclonal antibody (M01), clone 1D1.

Lane 1: MYLK transfected lysate(110.2 KDa).

Lane 2: Non-transfected lysate.

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- ELISA

Gene Info — MYLK

Entrez GeneID

[4638](#)

GeneBank Accession#

[NM_053025](#)

Protein Accession#

[NP_444253](#)

Gene Name

MYLK

Gene Alias

DKFZp686I10125, FLJ12216, KRP, MLCK, MLCK1, MLCK108, MLCK210, MSTP083, MYLK1, smMLCK

Gene Description

myosin light chain kinase

Omim ID

[600922](#)

Gene Ontology

[Hyperlink](#)

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

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](#)