
Product Name: MYLK Mouse Monoclonal Antibody**Catalog #: AMM82460**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,IHC,ICC,ELISA,FC
Reactivity	Human, Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in PBS with 0.05% sodium azide
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:200-1:1000,ICC 1:200-1:1000,ELISA 1:5000-1:20000,FC 1:200-1:400
Molecular Weight	210kDa

Antigen Information

Gene Name	MYLK
Alternative Names	KRP; AAT7; MLCK; MLCK1; MMIHS; MYLK1; smMLCK; MLCK108; MLCK210; MSTP083
Gene ID	4638.0
SwissProt ID	Q15746
Immunogen	Purified recombinant fragment of human MYLK (AA:1375-1524) expressed in E. Coli.

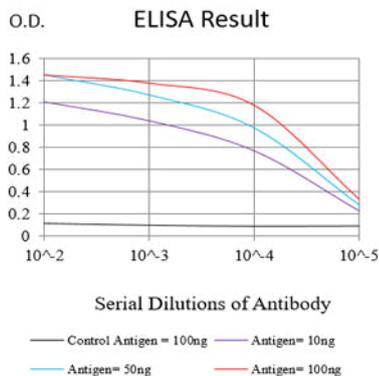
Background

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

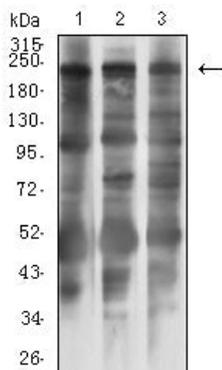
isoforms. In addition, using a separate promoter in an intron in the 3' region, it encodes telokin, a small protein identical in sequence to the C-terminus of myosin light chain kinase, that is independently expressed in smooth muscle and functions to stabilize unphosphorylated myosin filaments. A pseudogene 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.

Research Area

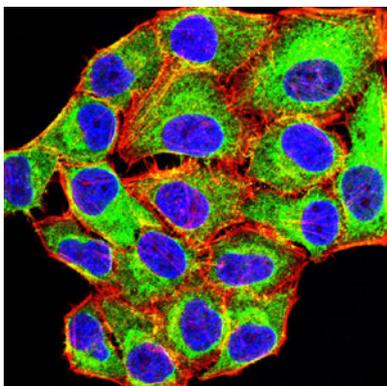
Image Data



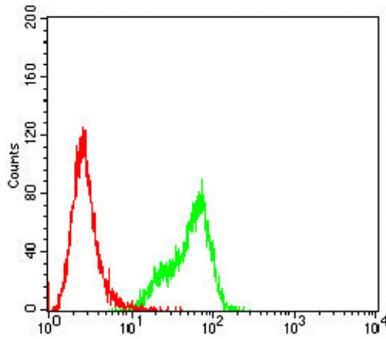
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)



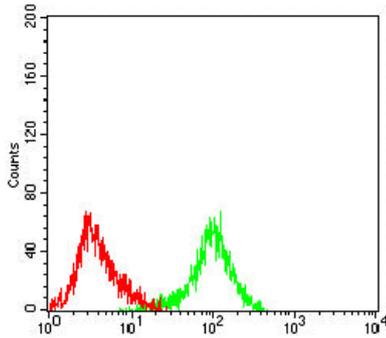
Western blot analysis using MYLK mouse mAb against PC-3 (1), C2C12 (2), and HeLa (3) cell lysate.



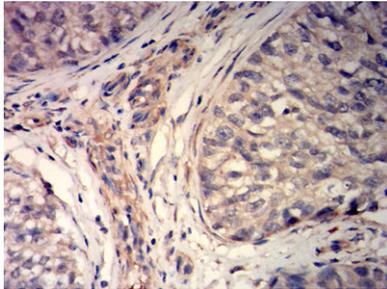
Immunofluorescence analysis of HeLa cells using MYLK mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin.



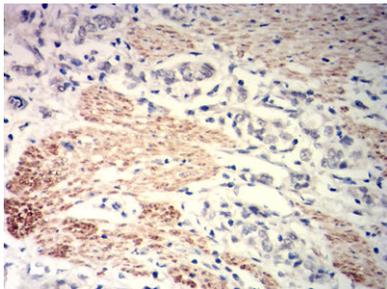
Flow cytometric analysis of HeLa cells using MYLK mouse mAb (green) and negative control (red).



Flow cytometric analysis of LNCAP cells using MYLK mouse mAb (green) and negative control (red).



Immunohistochemical analysis of paraffin-embedded human bladder cancer tissues using MYLK mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded human gastric cancer tissues using MYLK mouse mAb with DAB staining.