

# Anti-MLCK Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

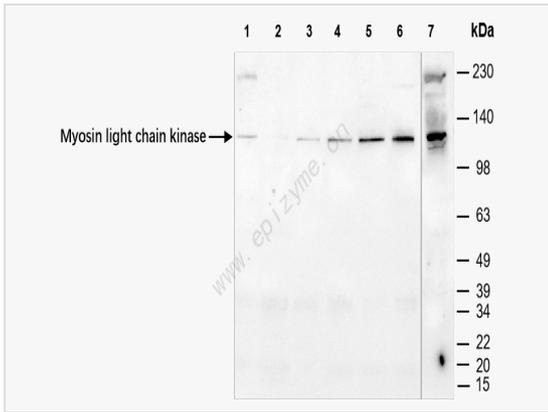
Catalog # R015404

## Product Information

Application	WB, IHC-P/IF (Tissue-P), ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	26S15K06
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Myosin light chain kinase
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-MLCK Rabbit mAb [26S15K06] is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

Synonyms	deglutamylated form; DKFZp686I10125; EC 2.7.11.18; FLJ12216; Kinase related protein; Kinase-related protein; KRP; MLCK; MLCK1; MLCK108; MLCK210; MSTP083; MYLK; MYLK_HUMAN; MYLK1; Myosin light chain kinase; Myosin light polypeptide kinase; OTTHUMP00000180642; OTTHUMP00000180643; smMLCK; smooth muscle; Smooth muscle myosin light chain kinase; Telokin.
Calculated MW	Calculated MW: 211 kDa; Observed MW: 130 kDa
Uniprot ID	Q15746
Gene ID	4638
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. [provided by RefSeq, Jul 2008]
Tissue Location	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



Western Blot - Anti-MLCK Rabbit mAb [26S15K06]

All lanes: R015404 at 1:1,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: A431 (Human epidermoid teratoma cell line) whole cell lysates

Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lane 4: T24 (Human bladder cancer epithelial cell) whole cell lysates

Lane 5: U87 (Human malignant glioblastoma epithelial cells) whole cell lysates

Lane 6: C2C12 (Mouse myoblasts epithelial cell) whole cell lysates

Lane 7: Rat liver whole tissue lysates

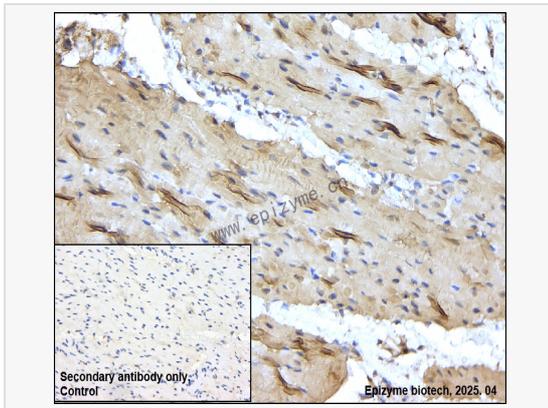
Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 211 kDa

Observed band size: 130 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunohistochemistry - Anti-MLCK Rabbit mAb [26S15K06]

Sample: Paraformaldehyde-fixed, paraffin embedded rat bladder tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R015404 at 1:200 dilution

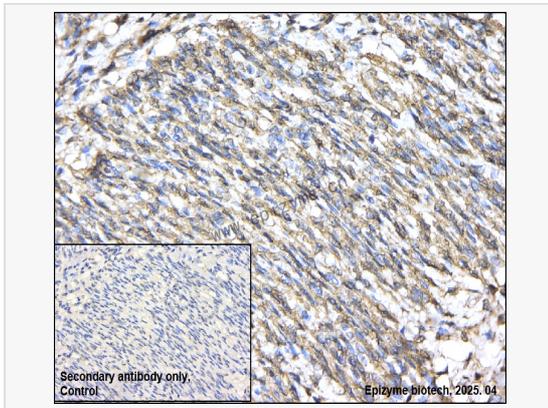
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-MLCK Rabbit mAb [26S15K06]

Sample: Paraformaldehyde-fixed, paraffin embedded human endometrial carcinoma tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R015404 at 1:200 dilution

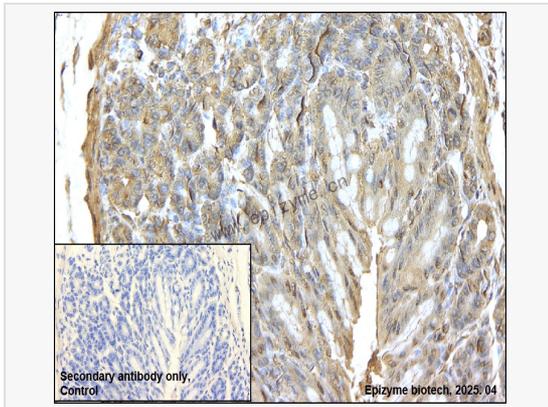
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-MLCK Rabbit mAb [26S15K06]

Sample: Paraformaldehyde-fixed, paraffin embedded mouse stomach tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R015404 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.