

MYLK recombinant antibody

MYLK Recombinant Monoclonal Antibody

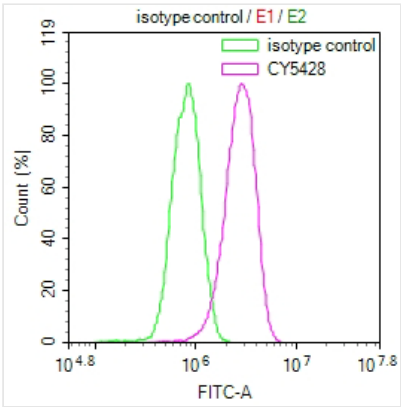
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA278976	HEK293F Cell	Human	Flow Cytometry, Functional Assay, Western Blot, ELISA

PRODUCT SYNONYMS

MYLK; Monoclonal Recombinant Antibody; MYLK Recombinant Monoclonal Antibody; Myosin light chain kinase; smooth muscle (MLCK)(smMLCK)(EC 2.7.11.18)(Kinase-related protein)(KRP)(Telokin) [Cleaved into: Myosin light chain kinase; smooth muscle; deglutamylated form]; MLCK MLCK1 MYLK1; MYLK recombinant antibody

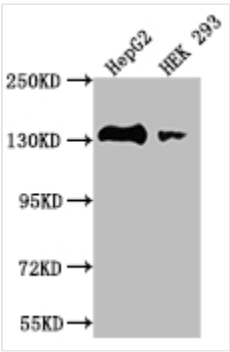
PRODUCT SPECIFICATIONS

Host	HEK293F Cell
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Number	28C5
Purity/Purification	Affinity purified
Form/Format	Liquid; PBS, 150mM NaCl, 0.02% sodium azide, 50% glycerol, pH 7.4.
Applicable Applications for MYLK recombinant antibody	FCM/FACS (Flow Cytometry), WB (Western Blot), ELISA
Immunogen Species	Human
Immunogen	A synthesized peptide derived from Human MYLK
Conjugation	Non-conjugated
Research Area	Signal transduction
Preparation and Storage	Upon receipt, store at -20 degree C or -80 degree C. Avoid repeated freeze.



FCM/FACS (Flow Cytometry)

Overlay Peak curve showing A549 cells stained with (red line) at 1:100. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1ug/1*10⁶cells) for 45min at 4?. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4?. Control antibody (green line) was rabbit IgG (1ug/1*10⁶cells) used under the same conditions. Acquisition of >10,000 events was performed.



WB (Western Blot)

Western BlotPositive WB detected in: HepG2 whole cell lysate, HEK293 whole cell lysateAll lanes: MYLK antibody at 1:2000SecondaryGoat polyclonal to rabbit IgG at 1/50000 dilutionPredicted band size: 211, 204, 206, 198, 203, 111, 17, 81 kDaObserved band size: 130-250 kDa

ADDITIONAL INFORMATION

Related Product Information for MYLK recombinant antibody

Calcium/calmodulin-dependent myosin light chain kinase implicated in smooth muscle contraction via phosphorylation of myosin light chains (MLC). Also regulates actin-myosin interaction through a non-kinase activity. Phosphorylates PTK2B/PYK2 and myosin light-chains. Involved in the inflammatory response (e.g. apoptosis, vascular permeability, leukocyte diapedesis), cell motility and morphology, airway hyperreactivity and other activities relevant to asthma. Required for tonic airway smooth muscle contraction that is necessary for physiological and asthmatic airway resistance. Necessary for gastrointestinal motility. Implicated in the regulation of endothelial as well as vascular permeability, probably via the regulation of cytoskeletal rearrangements. In the nervous system it has been shown to control the growth initiation of astrocytic processes in culture and to participate in transmitter release at synapses formed between cultured sympathetic ganglion cells. Critical participant in signaling sequences that result in fibroblast apoptosis. Plays a role in the regulation of epithelial cell survival. Required for epithelial wound healing, especially during actomyosin ring contraction during purse-string wound closure. Mediates RhoA-dependent membrane blebbing. Triggers TRPC5 channel activity in a calcium-dependent signaling, by inducing its subcellular localization at the plasma membrane. Promotes cell migration (including tumor cells) and tumor metastasis. PTK2B/PYK2 activation by phosphorylation mediates ITGB2 activation and is thus essential to trigger neutrophil transmigration during acute lung injury (ALI). May regulate optic nerve head astrocyte migration. Probably involved in mitotic cytoskeletal regulation. Regulates tight junction probably by modulating ZO-1 exchange in the perijunctional actomyosin ring. Mediates burn-induced microvascular barrier injury; triggers endothelial contraction in the development of microvascular hyperpermeability by phosphorylating MLC. Essential for intestinal barrier dysfunction. Mediates Giardia spp.-mediated reduced epithelial barrier function during giardiasis intestinal infection via reorganization of cytoskeletal F-actin and tight junctional ZO-1. Necessary for hypotonicity-induced Ca(2+) entry and subsequent activation of volume-sensitive organic osmolyte/anion channels (VSOAC) in cervical cancer cells. Responsible for high proliferative ability of breast cancer cells through anti-apoptosis.
{ECO:0000269|PubMed:11113114, ECO:0000269|PubMed:11976941, ECO:0000269|PubMed:15020676, ECO:0000269|PubMed:15825080, ECO:0000269|PubMed:16284075, ECO:0000269|PubMed:16723733, ECO:0000269|PubMed:18587400, ECO:0000269|PubMed:18710790, ECO:0000269|PubMed:19826488, ECO:0000269|PubMed:20139351, ECO:0000269|PubMed:20181817, ECO:0000269|PubMed:20375339, ECO:0000269|PubMed:20453870}.

NCBI AND UNIPROT INFORMATION

NCBI GI #	116008192
NCBI GeneID	4638
NCBI Accession #	NP_444253.3
NCBI GenBank Nucleotide #	NM_053025.3

UniProt Accession #	Q15746; O95796; O95797; O95798; O95799; Q14844; Q16794; Q3ZCP9; Q5MY99; Q5MYA0; Q7Z4J0; Q9C0L5
Molecular Weight	210,715 Da
NCBI Official Full Name	myosin light chain kinase, smooth muscle isoform 1
NCBI Official Synonym Full Names	myosin light chain kinase
NCBI Official Symbol	MYLK
NCBI Official Synonym Symbols	KRP; AAT7; MLCK; MLCK1; MYLK1; smMLCK; MLCK108; MLCK210; MSTP083
NCBI Protein Information	myosin light chain kinase, smooth muscle; telokin; kinase-related protein; myosin, light polypeptide kinase; smooth muscle myosin light chain kinase
UniProt Protein Name	Myosin light chain kinase, smooth muscle
UniProt Gene Name	MYLK
UniProt Synonym Gene Names	MLCK; MLCK1; MYLK1; MLCK; smMLCK; KRP
UniProt Entry Name	MYLK_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/mylk-recombinant-antibody-clone-28c5-flow-cytometry-western-blot-elisa/278976>