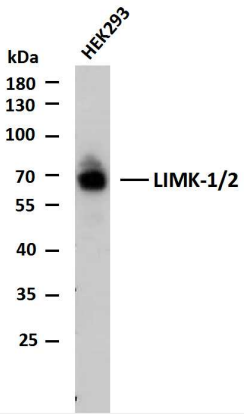
LIMK-1/2 (PTR2545) Mouse mAb

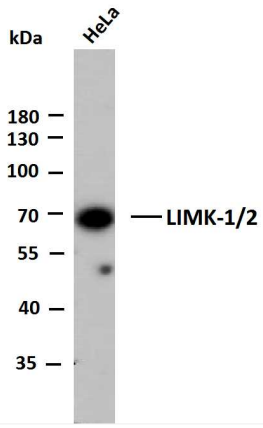
Catalog No	YP-Ab-17321
Isotype	IgG
Reactivity	Human, Mouse,Rat
Applications	WB,ELISA
Gene Name	LIMK1 LIMK
Protein Name	LIM domain kinase 1 (LIMK-1) (EC 2.7.11.1)
Immunogen	Synthesized peptide derived from human LIMK-1/2
Specificity	This antibody detects endogenous levels of LIMK-1/2 at Human, Mouse,Rat
Formulation	PBS, pH7.4, 50% glycerol, 0.03%Proclin 300
Source	Mouse,monoclonal:IgG1,Lambda
Purification	Protein G
Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	LIM domain kinase 1 (LIMK-1) (EC 2.7.11.1)
Observed Band	70kDa
Cell Pathway	Cytoplasm . Nucleus . Cytoplasm, cytoskeleton . Cell projection, lamellipodium . Predominantly found in the cytoplasm. Localizes in the lamellipodium in a CDC42BPA, CDC42BPB and FAM89B/LRAP25-dependent manner. .
Tissue Specificity	Highest expression in both adult and fetal nervous system. Detected ubiquitously throughout the different regions of adult brain, with highest levels in the cerebral cortex. Expressed to a lesser extent in heart and skeletal muscle.
Function	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,disease:Haploinsufficiency of LIMK1 may be the cause of certain cardiovascular and musculo-skeletal abnormalities observed in Williams-Beuren syndrome (WBS), a rare developmental disorder. It is a contiguous gene deletion syndrome involving genes from chromosome band 7q11.23.,function:Protein kinase which regulates actin filament dynamics. Phosphorylates and inactivates the actin binding/depolymerizing factor cofilin, thereby stabilizing the actin cytoskeleton. Isoform 3 has a dominant negative effect on actin cytoskeletal changes. May be involved in brain development.,PTM:Autophosphorylated.,PTM:Phosphorylated on serine and/or threonine residues by ROCK1. May be dephosphorylated and inactivated by SSH1.,similarity:Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family.,similarity:Contains 1 PDZ (DHR) doma

Background	LIM domain kinase 1(LIMK1) Homo sapiens There are approximately 40 known eukaryotic LIM proteins, so named for the LIM domains they contain. LIM domains are highly conserved cysteine-rich structures containing 2 zinc fingers. Although zinc fingers usually function by binding to DNA or RNA, the LIM motif probably mediates protein-protein interactions. LIM kinase-1 and LIM kinase-2 belong to a small subfamily with a unique combination of 2 N-terminal LIM motifs and a C-terminal protein kinase domain. LIMK1 is a serine/threonine kinase that regulates actin polymerization via phosphorylation and inactivation of the actin binding factor cofilin. This protein is ubiquitously expressed during development and plays a role in many cellular processes associated with cytoskeletal structure. This protein also stimulates axon growth and may play a role in brain development. LIMK1 hemizygosity is implicated in the impaired visuospatial constructive cog
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

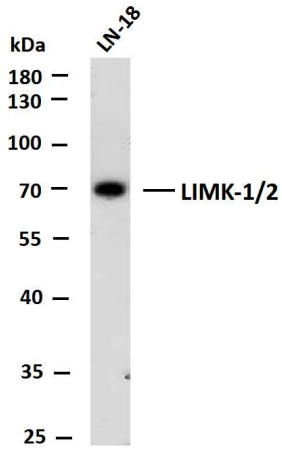
Products Images



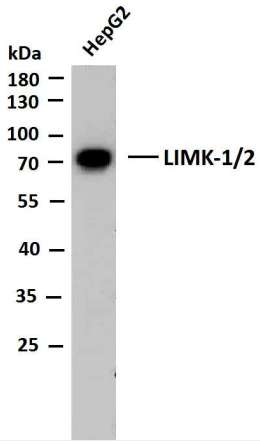
Whole cell lysates of HEK293 were separated by 10% SDS-PAGE, and the membrane was blotted with anti-LIMK-1/2 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HEK293 Predicted band size: 65,72kDa Observed band size: 68,72kDa



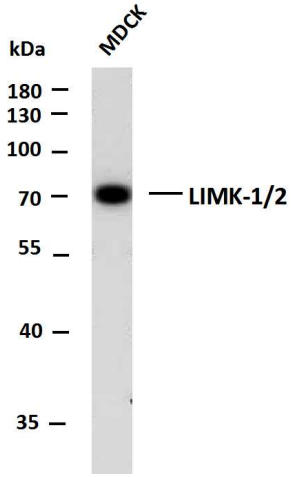
Whole cell lysates of HeLa were separated by 10% SDS-PAGE, and the membrane was blotted with anti-LIMK-1/2 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HeLa Predicted band size: 65,72kDa Observed band size: 68kDa



Whole cell lysates of LN-18 were separated by 10% SDS-PAGE, and the membrane was blotted with anti-LIMK-1/2 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: LN-18 Predicted band size: 65,72kDa Observed band size: 70kDa



Whole cell lysates of HepG2 were separated by 10% SDS-PAGE, and the membrane was blotted with anti-LIMK-1/2 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HepG2 Predicted band size: 65,72kDa Observed band size: 72kDa



Whole cell lysates of MDCK were separated by 10% SDS-PAGE, and the membrane was blotted with anti-LIMK-1/2 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: MDCK Predicted band size: 65,72kDa Observed band size: 70kDa