

LIMK-1/2 (PTR2545) Mouse mAb

Catalog No :	YM4686
Reactivity :	Human; Mouse (predicted: Rat)
Applications :	WB;ELISA
Target :	LIMK-1/2
Fields :	>>Axon guidance;>>Fc gamma R-mediated phagocytosis;>>Regulation of actin cytoskeleton;>>Yersinia infection;>>Human immunodeficiency virus 1 infection
Gene Name :	LIMK1 LIMK
Protein Name :	LIM domain kinase 1 (LIMK-1) (EC 2.7.11.1)
Human Swiss Prot No :	P53667/P53671
Rat Swiss Prot No :	P53669
Immunogen :	Synthesized peptide derived from human LIMK-1/2 AA range: 500-600
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
Dilution :	WB 1:500-2000 ELISA 1:5000-20000
Purification :	Protein G
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	70kDa
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 hemizyosity is implicated in the impaired visuospatial constructive cog

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

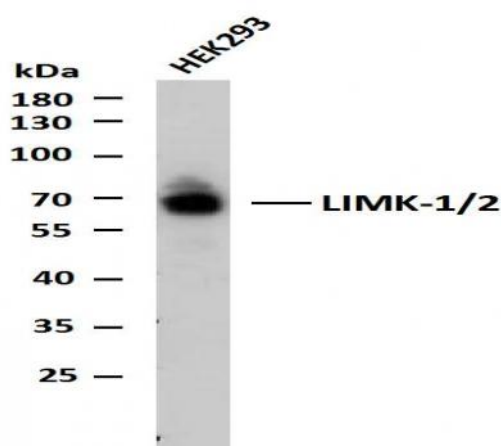
Subcellular Location :

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. .

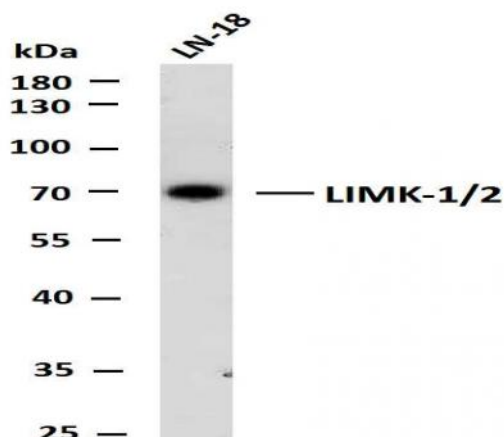
Expression :

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.

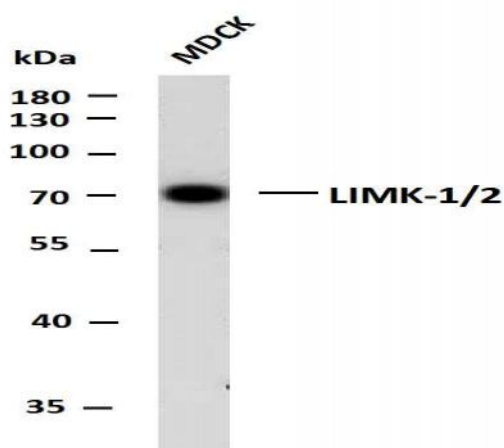
Products Images



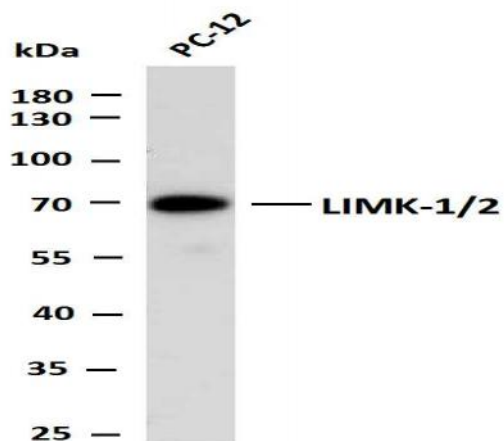
Whole cell lysates of HEK293 were separated by 10% SDS-PAGE, and the membrane was blotted with anti-LIMK-1/2(PTR2545) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: HEK293 Predicted band size: 65,72kDa Observed band size: 68,72kDa



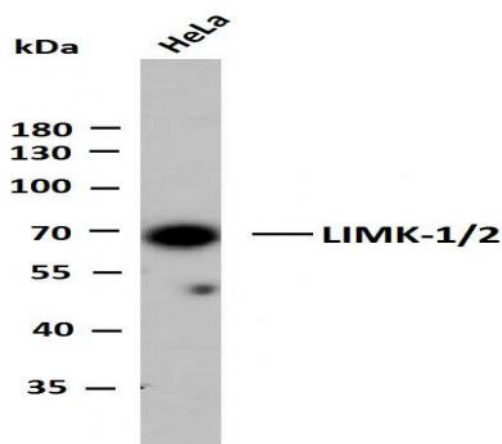
Whole cell lysates of LN-18 were separated by 10% SDS-PAGE, and the membrane was blotted with anti-LIMK-1/2(PTR2545) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: LN-18
Predicted band size: 65,72kDa Observed band size: 70kDa



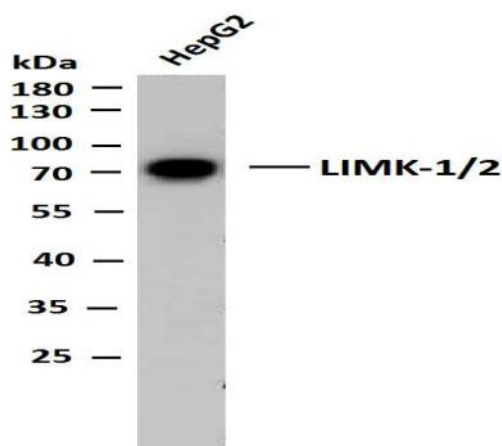
Whole cell lysates of MDCK were separated by 10% SDS-PAGE, and the membrane was blotted with anti-LIMK-1/2(PTR2545) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: MDCK
Predicted band size: 65,72kDa Observed band size: 70kDa



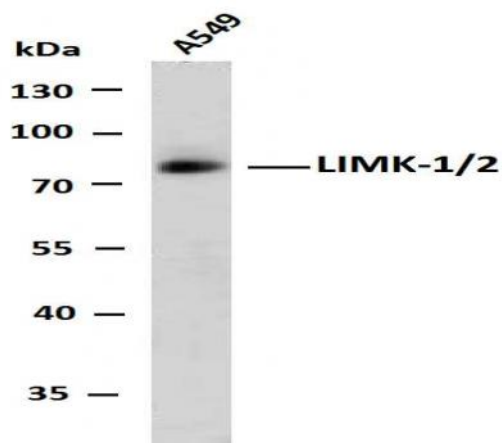
Whole cell lysates of PC-12 were separated by 10% SDS-PAGE, and the membrane was blotted with anti-LIMK-1/2(PTR2545) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: PC-12
Predicted band size: 65,72kDa Observed band size: 70kDa



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-Mouse 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 HepG2 were separated by 10% SDS-PAGE, and the membrane was blotted with anti-LIMK-1/2 antibody. The HRP-conjugated Goat anti-Mouse 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 A549 were separated by 10% SDS-PAGE, and the membrane was blotted with anti-LIMK-1/2 antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: A549 Predicted band size: 65,72kDa Observed band size: 72kDa