

LIMK-2 (phospho Thr505) Polyclonal Antibody

Catalog No :	YP0162
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	LIMK-2
Fields :	>>Axon guidance;>>Fc gamma R-mediated phagocytosis;>>Regulation of actin cytoskeleton;>>Human immunodeficiency virus 1 infection
Gene Name :	LIMK2
Protein Name :	LIM domain kinase 2
Human Gene Id :	3985
Human Swiss Prot No :	P53671
Mouse Gene Id :	16886
Mouse Swiss Prot No :	O54785
Rat Gene Id :	29524
Rat Swiss Prot No :	P53670
Immunogen :	Synthesized phospho-peptide around the phosphorylation site of human LIMK-2 (phospho Thr505)
Specificity :	Phospho-LIMK-2 (T505) Polyclonal Antibody detects endogenous levels of LIMK-2 protein only when phosphorylated at T505.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not

yet tested in other applications.

Purification : The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15 °C to -25 °C/1 year(Do not lower than -25 °C)

Molecularweight : 72kD

Cell Pathway : Axon guidance;Fc gamma R-mediated phagocytosis;Regulates Actin and Cytoskeleton;

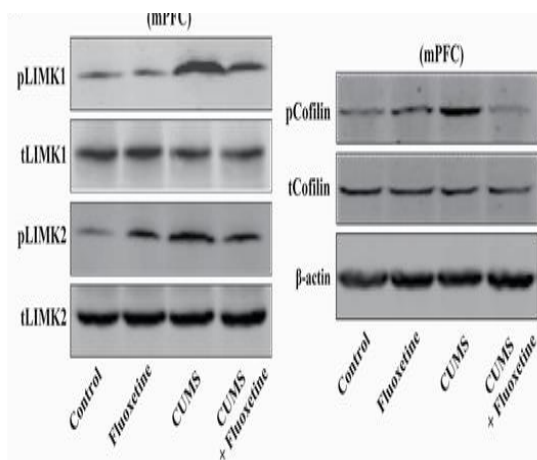
Background : There are approximately 40 known eukaryotic LIM proteins, so named for the LIM domains they contain. LIM domains are highly conserved cysteine-rich structures containing 2 zinc fingers. Although zinc fingers usually function by binding to DNA or RNA, the LIM motif probably mediates protein-protein 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. The protein encoded by this gene is phosphorylated and activated by ROCK, a downstream effector of Rho, and the encoded protein, in turn, phosphorylates cofilin, inhibiting its actin-depolymerizing activity. It is thought that this pathway contributes to Rho-induced reorganization of the actin cytoskeleton. At least three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],

Function : catalytic activity:ATP + a protein = ADP + a phosphoprotein.,function:Displays serine/threonine-specific phosphorylation of myelin basic protein and histone (MBP) in vitro.,PTM:Phosphorylated on serine and/or threonine residues by ROCK1.,similarity:Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family.,similarity:Contains 1 PDZ (DHR) domain.,similarity:Contains 1 protein kinase domain.,similarity:Contains 2 LIM zinc-binding domains.,subcellular location:Isoform LIMK2a is distributed in the cytoplasm and the nucleus.,subcellular location:Isoform LIMK2b occurs mainly in the cytoplasm and is scarcely translocated to the nucleus.,subunit:Binds ROCK1 and LKAP. Interacts with PARD3. Interacts with NISCH.,tissue specificity:Highest expression in the placenta; moderate level in liver, lung, kidney, and pancreas. LIMK2a is found to be more abundant than LIMK2b in liver, col

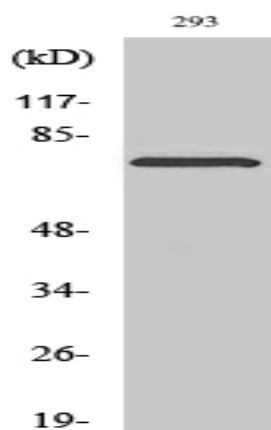
Subcellular Location : Cytoplasm, cytoskeleton, spindle . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome .; [Isoform LIMK2a]: Cytoplasm . Nucleus .; [Isoform LIMK2b]: Cytoplasm . Cytoplasm, perinuclear region . Nucleus . Mainly present in the cytoplasm and is scarcely translocated to the nucleus. .

Expression : Hepatoma,Lung,Ovary,

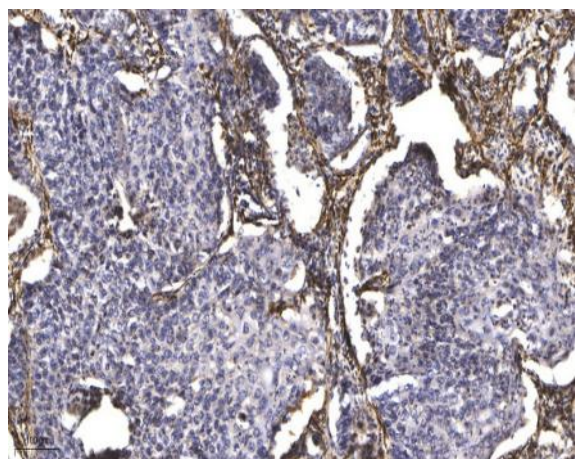
Products Images



Gao, Ting-Ting, et al. "LIMK1/2 in the mPFC plays a role in chronic stress-induced depressive-like effects in mice." *International Journal of Neuropsychopharmacology* 23.12 (2020): 821-836.



Western Blot analysis of various cells using Phospho-LIMK-2 (T505) Polyclonal Antibody



Immunohistochemical analysis of paraffin-embedded human Squamous cell carcinoma of lung. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).