



LIMK-2 Polyclonal Antibody

Catalog No	YP-Ab-14815
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	LIMK2
Immunogen	The antiserum was produced against synthesized peptide derived from human LIMK2. AA range:249-298
Specificity	LIMK-2 Polyclonal Antibody detects endogenous levels of LIMK-2 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	LIMK-2;LIMK 2;LIM domain kinase 2;EC:2.7.11.1;LIMK2
Observed Band	72kD
Calculated Molecular Weight	72kD
Cell Pathway	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. .
Tissue Specificity	Hepatoma,Lung,Ovary,
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 then LIMK2b in liver, col

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],

matters needing attention

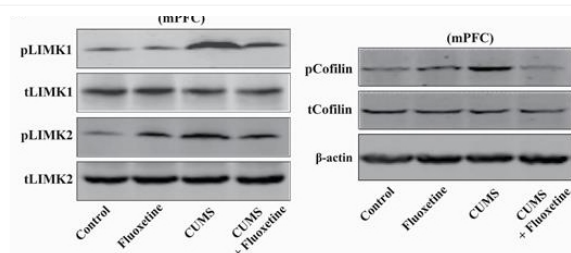
Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

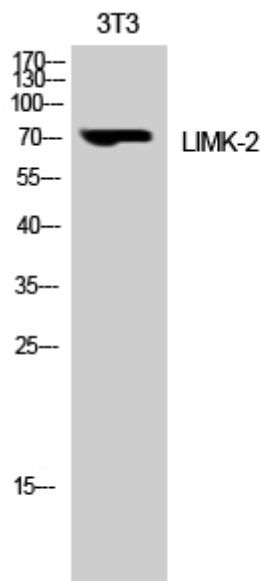


Products Images

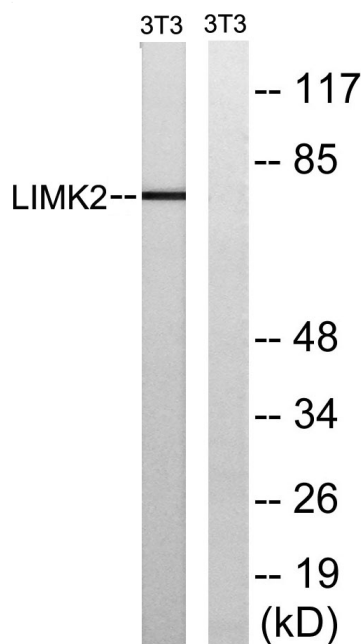


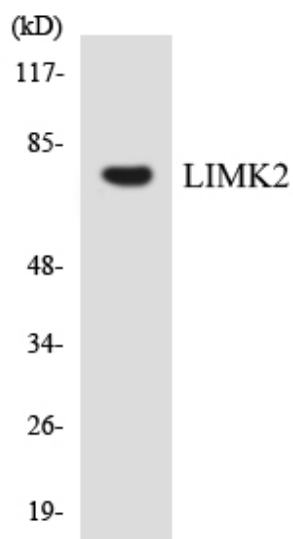
Gao, Ting-Ting, et al. "LIMK1/2 in the mPFC plays a role in chronic stress-induced depressive-like effects in mice." *International Journal of Neuropsychopharmacology* 23.12 (2020): 821-836.

Western Blot analysis of 3T3 cells using LIMK-2 Polyclonal Antibody



Western blot analysis of lysates from NIH/3T3 cells, treated with PMA 125ng/ml 30', using LIMK2 Antibody. The lane on the right is blocked with the synthesized peptide.





Western blot analysis of the lysates from RAW264.7 cells using LIMK2 antibody.