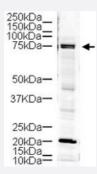


LIMK1 polyclonal antibody

Catalog # PAB10258 Size 100 ug

Applications



Western Blot (Tissue lysate)

Western blot using LIMK1 polyclonal antibody (Cat # PAB10258) shows detection of a 73 KDa band corresponding to LIMK1 in lysates from mouse brain.

Approximately 18 ug of lysate wasrun on a SDS-PAGE and transferred onto nitrocellulose followed by reaction with a 1:500 dilution of LIMK1 polyclonal antibody.

The doublet band at \sim 75 KDa may represent phosphorylated and non-phosphorylated forms of the protein.

The identity of the strong lower molecular weight band at approximately 20 KDa is unknown.

Signal was detected using standard techniques.

Specification	
Product Description	Rabbit polyclonal antibody raised against synthetic peptide of LIMK1.
Immunogen	A synthetic peptide corresponding to amino acids 630-647 of human LIMK1.
Host	Rabbit
Reactivity	Chimpanzee, Human, Mouse, Orangutan, Rat
Specificity	This affinity purified antibody is directed against human LIM kinase protein.
Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:8000-1:36000)
	Western Blot (1:500-1:2000) The optimal working dilution should be determined by the end user.
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Product Information

Storage Buffer	In 20 mM KH ₂ PO ₄ , 150 mM NaCl, pH 7.2 (0.01% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

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- Immunofluorescence
- Enzyme-linked Immunoabsorbent Assay

Gene Info — LIMK1	
Entrez GeneID	<u>3984</u>
Protein Accession#	P53667;NP_002305(isoform1)
Gene Name	LIMK1
Gene Alias	LIMK
Gene Description	LIM domain kinase 1
Omim ID	601329
Gene Ontology	<u>Hyperlink</u>



Product Information

Gene Summary

There are approximately 40 known eukaryotic LIM proteins, so named for the LIM domains they c ontain. LIM domains are highly conserved cysteine-rich structures containing 2 zinc fingers. Althou gh 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 likely to be a component of an intracellular signaling pathway and may be involved in brain development. LIMK1 hemizygosity is implicated in the impaired visuospatial constructive cognition of Williams syndrome. [provided by RefSeq

Other Designations

LIM motif-containing protein kinase OTTHUMP00000025066

Publication Reference

LATS1 tumour suppressor affects cytokinesis by inhibiting LIMK1.

Yang X, Yu K, Hao Y, Li DM, Stewart R, Insogna KL, Xu T.

Nature Cell Biology 2004 Jul; 6(7):609.

Application: IF, IP, WB-Tr, Monkey, Mouse, CHO, COS-7 cells

LIM kinase 1, a key regulator of actin dynamics, is widely expressed in embryonic and adult tissues.

Foletta VC, Moussi N, Sarmiere PD, Bamburg JR, Bernard O.

Experimental Cell Research 2004 Apr; 294(2):392.

Application: Flow Cyt, IF, IHC-P, WB, Human, Mouse, Rat, HEK 293T cells, Mouse embryos, NIH/3T3 cells, Ratrat hippocampal neurons

p57Kip2 regulates actin dynamics by binding and translocating LIM-kinase 1 to the nucleus.

Yokoo T, Toyoshima H, Miura M, Wang Y, lida KT, Suzuki H, Sone H, Shimano H, Gotoda T, Nishimori S, Tanaka K, Yamada N. The Journal of Biological Chemistry 2003 Dec; 278(52):52919.

Application: WB-Tr, Human, RKO cells

Pathway

- Axon guidance
- Fc gamma R-mediated phagocytosis
- Regulation of actin cytoskeleton

Disease



- Brain Ischemia
- Cerebral Hemorrhage
- Cleft Lip
- Cleft Palate
- Genetic Predisposition to Disease
- Intracranial Aneurysm
- Metabolic Syndrome X
- Renal Insufficiency
- Stroke
- Werner syndrome