

LIMK1 (phospho T508) polyclonal antibody

Catalog # PAB7928 Size 100 uL

Applications



Western Blot (Recombinant protein)

Western blot of activated mouse recombinant LIMK1untreated (lane 1) or treated with lambda phosphatase (lane 2). The blots were probed with LIMK1 (phospho T508) polyclonal antibody (Cat # PAB7928).

Specification	
Product Description	Rabbit polyclonal antibody raised against synthetic phosphopeptide of LIMK1.
Immunogen	Synthetic phosphopeptide corresponding to residues surrounding T508 of human LIMK1.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Specificity	This sequence is conserved in rat and mouse LIMK1, and has high homology to Thr-505 in human LI MK2.
Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:2000) Western Blot (1:500) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (50% glycerol, 1 mg/mL BSA, 0.05% sodium azide)



Product Information

Storage Instruction	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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Enzyme-linked Immunoabsorbent Assay

Gene Info — LIMK1	
Entrez GenelD	3984
Gene Name	LIMK1
Gene Alias	LIMK
Gene Description	LIM domain kinase 1
Omim ID	601329
Gene Ontology	<u>Hyperlink</u>
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 OTTHUMP0000025066

Publication Reference

Product Information



• MAPKAPK-2-mediated LIM-kinase activation is critical for VEGF-induced actin remodeling and cell migration.

Kobayashi M, Nishita M, Mishima T, Ohashi K, Mizuno K.

The EMBO Journal 2006 Feb; 25(4):713.

Activation of LIM-kinase by Pak1 couples Rac/Cdc42 GTPase signalling to actin cytoskeletal dynamics.

Edwards DC, Sanders LC, Bokoch GM, Gill GN.

Nature Cell Biology 1999 Sep; 1(5):253.

Identification and characterization of a novel family of serine/threonine kinases containing two N-terminal LIM motifs.

Okano I, Hiraoka J, Otera H, Nunoue K, Ohashi K, Iwashita S, Hirai M, Mizuno K.

The Journal of Biological Chemistry 1995 Dec; 270(52):31321.

Pathway

- Axon guidance
- <u>Fc gamma R-mediated phagocytosis</u>
- 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