

LIMK-1/2 (phospho Thr508/505) rabbit pAb**Cat#: orb764339 (Manual)**

For research use only. Not intended for diagnostic use.

Product Name	LIMK-1/2 (phospho Thr508/505) rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Mouse;Rat
Recommended dilutions	WB 1:500-2000;IHC-p 1:100-500;IF/ICC 1:100-500;ELISA 1:5000-20000
Immunogen	Synthesized phospho-peptide around the phosphorylation site of human LIMK-1/2 (phospho Thr508/505)
Specificity	Phospho-LIMK-1/2 (T508/505) Polyclonal Antibody detects endogenous levels of LIMK-1/2 protein only when phosphorylated at T508/505.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	LIM domain kinase 1/LIM domain kinase 2
Gene Name	LIMK1/LIMK2
Cellular localization	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. .
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Clonality	Polyclonal
Concentration	1 mg/ml
Observed band	72kD
Human Gene ID	3984/3985
Human Swiss-Prot Number	P53667/P53671
Alternative Names	LIMK1; LIMK; LIM domain kinase 1; LIMK-1; LIMK2; LIM domain kinase 2; LIMK-2

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. 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 hemizygoty is implicated in the impaired visuospatial constructive cog