



LIMK-2 (phospho Ser283) Polyclonal Antibody

E20-61028**Catalog Number:**E20-61028**Amount:**100ul**Applications:**WB;IHC;IF;ELISA**Reactivity:**Human;Mouse;Rat;Monkey**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:**The antiserum was produced against synthesized peptide derived from human LIMK2 around the phosphorylation site of Ser283. AA range:249-298**Specificity:**Phospho-LIMK-2 (S283) Polyclonal Antibody detects endogenous levels of LIMK-2 protein only when phosphorylated at S283.**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. ELISA: 1:5000.. IF 1:50-200**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)**Other Name:**LIMK2;LIM domain kinase 2;LIMK-2**Observed Band(KD):**72kD**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

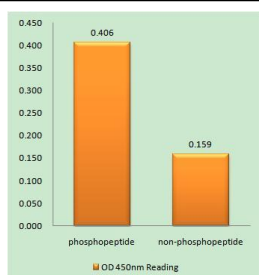
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protein-protein interactions. LIM kinase-1 and LIM kinase-2 belong to a small subfamily with a unique combination of 2 N-terminal LIM motifs and a C-terminal protein kinase domain. The protein encoded by this gene is phosphorylated and activated by 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].

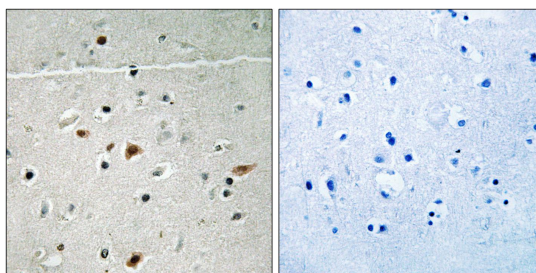
Function: catalytic activity: ATP + a protein = ADP + a phosphoprotein., function: Displays serine/threonine-specific phosphorylation of myelin basic protein and histone (MBP) in vitro., PTM: Phosphorylated on serine and/or threonine residues by ROCK1., similarity: Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family.

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.

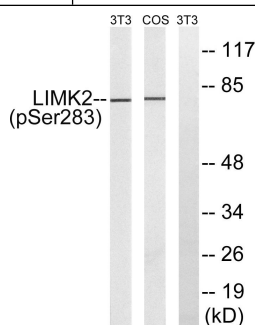
Expression: Hepatoma, Lung, Ovary



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using LIMK2 (Phospho-Ser283) Antibody.



Immunohistochemistry analysis of paraffin-embedded human brain, using LIMK2 (Phospho-Ser283) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of LIMK2 (Phospho-Ser283) Antibody. The lane on the right is blocked with the LIMK2 (Phospho-Ser283) peptide.