

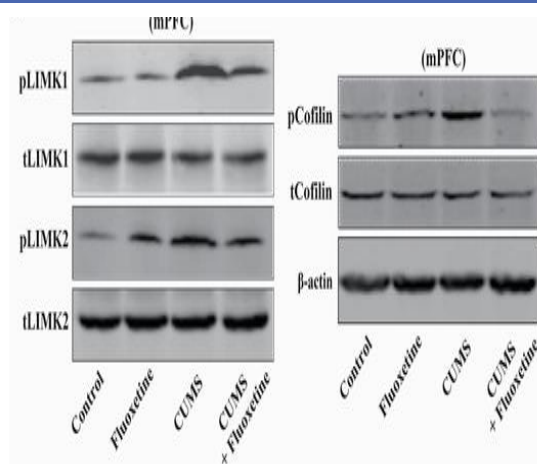
LIMK-1 (phospho Thr508) Polyclonal Antibody

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|------------------------------|---|
| Catalog No : | YP0161 |
| Reactivity : | Human;Mouse;Rat |
| Applications : | WB;IHC;IF;ELISA |
| Target : | LIMK-1 |
| Fields : | >>Axon guidance;>>Fc gamma R-mediated phagocytosis;>>Regulation of actin cytoskeleton;>>Yersinia infection;>>Human immunodeficiency virus 1 infection |
| Gene Name : | LIMK1 |
| Protein Name : | LIM domain kinase 1 |
| Human Gene Id : | 3984 |
| Human Swiss Prot No : | P53667 |
| Mouse Gene Id : | 16885 |
| Mouse Swiss Prot No : | P53668 |
| Rat Swiss Prot No : | P53669 |
| Immunogen : | The antiserum was produced against synthesized peptide derived from human LIMK1 around the phosphorylation site of Thr508. AA range:471-520 |
| Specificity : | Phospho-LIMK-1 (T508) Polyclonal Antibody detects endogenous levels of LIMK-1 protein only when phosphorylated at T508. |
| 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. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications. |

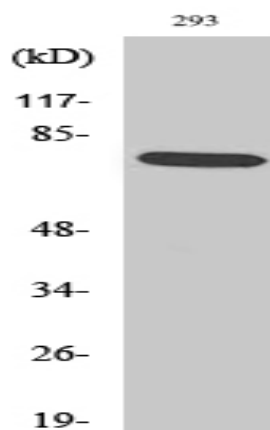
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| Purification : | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. |
| Concentration : | 1 mg/ml |
| Storage Stability : | -15°C to -25°C/1 year(Do not lower than -25°C) |
| Observed Band : | 72kD |
| Cell Pathway : | Axon guidance;Fc gamma R-mediated phagocytosis;Regulates Actin and Cytoskeleton; |
| 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 hemizyosity is implicated in the impaired visuospatial constructive cog |
| Function : | catalytic activity:ATP + a protein = ADP + a phosphoprotein.,disease:Haploinsufficiency of LIMK1 may be the cause of certain cardiovascular and musculo-skeletal abnormalities observed in Williams-Beuren syndrome (WBS), a rare developmental disorder. It is a contiguous gene deletion syndrome involving genes from chromosome band 7q11.23.,function:Protein kinase which regulates actin filament dynamics. Phosphorylates and inactivates the actin binding/depolymerizing factor cofilin, thereby stabilizing the actin cytoskeleton. Isoform 3 has a dominant negative effect on actin cytoskeletal changes. May be involved in brain development.,PTM:Autophosphorylated.,PTM:Phosphorylated on serine and/or threonine residues by ROCK1. May be dephosphorylated and inactivated by SSH1.,similarity:Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family.,similarity:Contains 1 PDZ (DHR) doma |
| Subcellular Location : | 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. . |
| Expression : | Highest expression in both adult and fetal nervous system. Detected ubiquitously throughout the different regions of adult brain, with highest levels in the cerebral cortex. Expressed to a lesser extent in heart and skeletal muscle. |

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| Tag : | orthogonal |
| Sort : | 1051 |
| No2 : | 3841T |
| No4 : | 1 |
| Host : | Rabbit |
| Modifications : | Phospho |

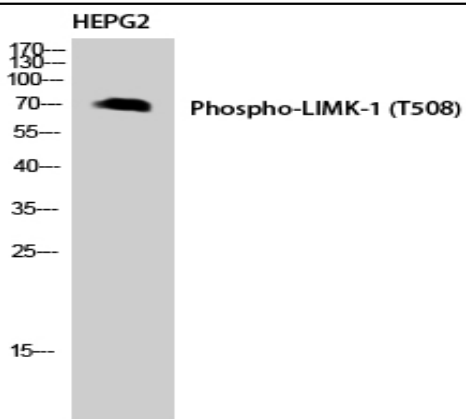
Products Images



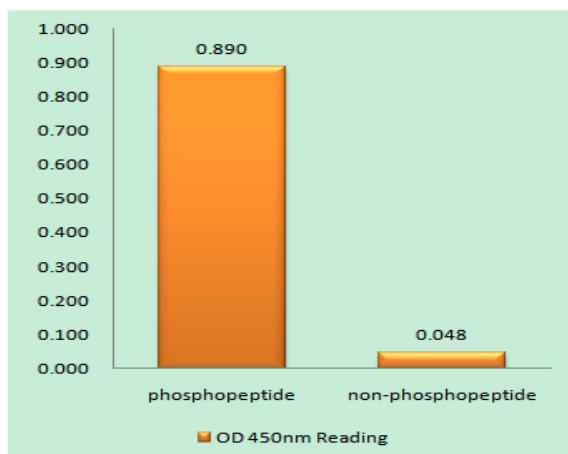
Gao, Ting-Ting, et al. "LIMK1/2 in the mPFC plays a role in chronic stress-induced depressive-like effects in mice." *International Journal of Neuropsychopharmacology* 23.12 (2020): 821-836.



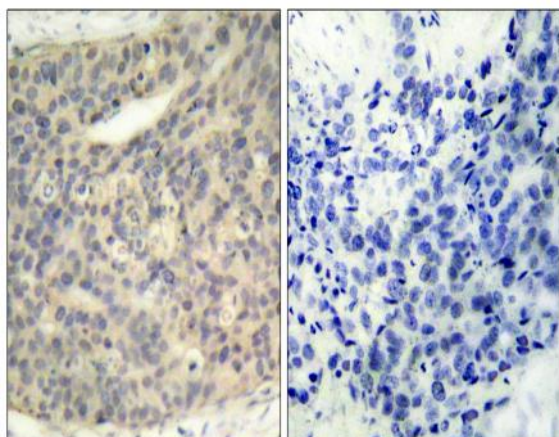
Western Blot analysis of 293 cells using Phospho-LIMK-1 (T508) Polyclonal Antibody diluted at 1:1000



Western Blot analysis of HEPG2 using Phospho-LIMK-1 (T508) Polyclonal Antibody. Antibody was diluted at 1:1000



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using LIMK1 (Phospho-Thr508) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using LIMK1 (Phospho-Thr508) Antibody. The picture on the right is blocked with the phospho peptide.

