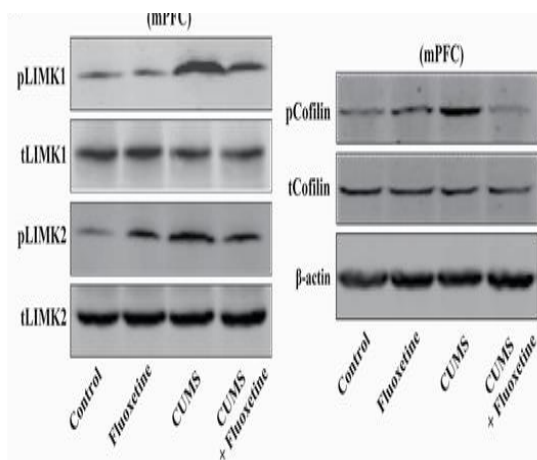


**LIMK-1 (phospho Thr508) Polyclonal Antibody**

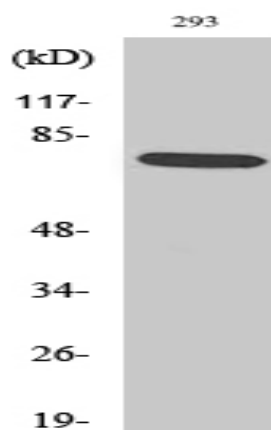
<b>Catalog No :</b>	YP0161
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	LIMK-1
<b>Fields :</b>	>>Axon guidance;>>Fc gamma R-mediated phagocytosis;>>Regulation of actin cytoskeleton;>>Yersinia infection;>>Human immunodeficiency virus 1 infection
<b>Gene Name :</b>	LIMK1
<b>Protein Name :</b>	LIM domain kinase 1
<b>Human Gene Id :</b>	3984
<b>Human Swiss Prot No :</b>	P53667
<b>Mouse Gene Id :</b>	16885
<b>Mouse Swiss Prot No :</b>	P53668
<b>Rat Swiss Prot No :</b>	P53669
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human LIMK1 around the phosphorylation site of Thr508. AA range:471-520
<b>Specificity :</b>	Phospho-LIMK-1 (T508) Polyclonal Antibody detects endogenous levels of LIMK-1 protein only when phosphorylated at T508.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.

<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Observed Band :</b>	72kD
<b>Cell Pathway :</b>	Axon guidance;Fc gamma R-mediated phagocytosis;Regulates Actin and Cytoskeleton;
<b>Background :</b>	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
<b>Function :</b>	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
<b>Subcellular Location :</b>	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. .
<b>Expression :</b>	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.

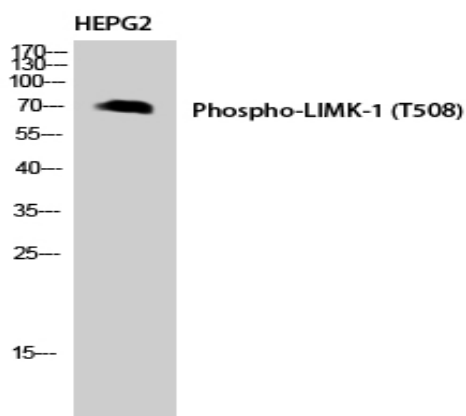
## Products Images



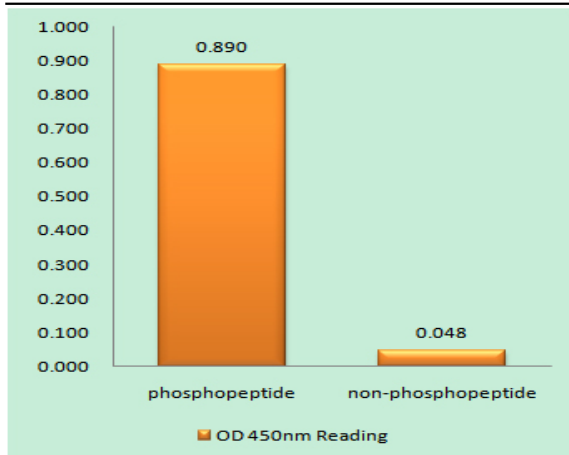
Gao, Ting-Ting, et al. "LIMK1/2 in the mPFC plays a role in chronic stress-induced depressive-like effects in mice." *International Journal of Neuropsychopharmacology* 23.12 (2020): 821-836.



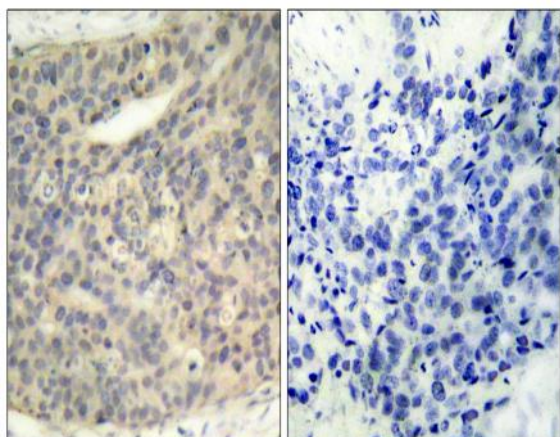
Western Blot analysis of 293 cells using Phospho-LIMK-1 (T508) Polyclonal Antibody diluted at 1:1000



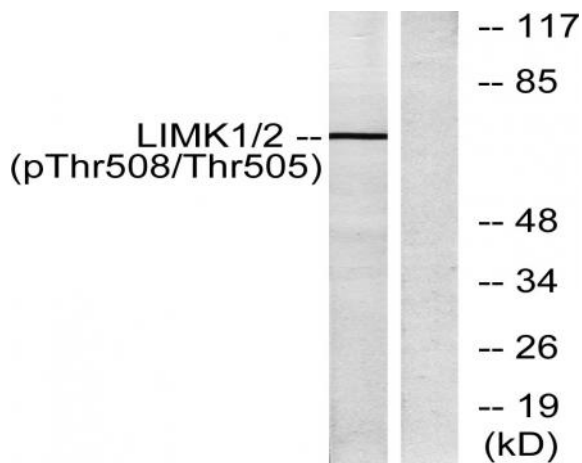
Western Blot analysis of HEPG2 using Phospho-LIMK-1 (T508) Polyclonal Antibody. Antibody was diluted at 1:1000



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.



Western blot analysis of lysates from COLO205 cells, using LIMK1 (Phospho-Thr508) Antibody. The lane on the right is blocked with the phospho peptide.