

Phospho LIMK1/2 (Thr508/505) Antibody

rev 12/19

CATALOG NO.: A1965-100 (100 µl)

BACKGROUND DESCRIPTION: 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 cognition of Williams syndrome. Alternative splicing results in multiple transcript variants encoding distinct isoforms.

ALTERNATE NAMES: LIMK; LIM domain kinase 1; LIMK-1

ANTIBODY TYPE: Polyclonal

HOST/ISOTYPE: Rabbit / IgG

IMMUNOGEN: KLH-conjugated synthetic peptide targeting a sequence within the C-term region of human LIMK1/2

MOLECULAR WEIGHT: 72 kDa

PURIFICATION: Affinity purified

FORM: Liquid

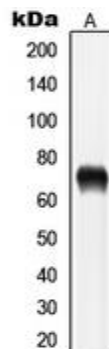
FORMULATION: In 0.42% Potassium phosphate; 0.87% NaCl; pH 7.3; 30% glycerol; and 0.01% sodium azide

SPECIES REACTIVITY: Human, Chicken, Rat, Bovine

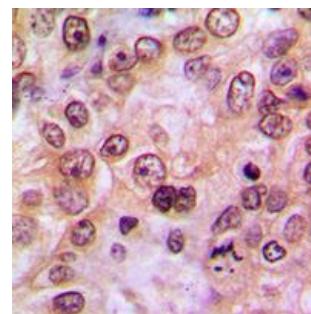
STORAGE CONDITIONS: Store at -20°C. Avoid freeze / thaw cycles

APPLICATIONS AND USAGE: WB 1:500 - 1:1000, IHC 1:100 - 1:200, IF 1:100 - 1:500

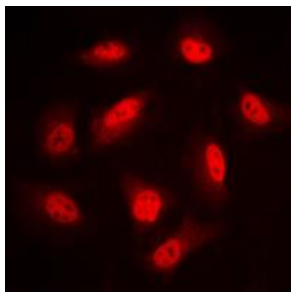
Note: This information is only intended as a guide. The optimal dilutions must be determined by the user



Western blot analysis of phospho LIMK1/2 (Thr508/505) expression in PC12 (A) whole cell lysates.



Immunohistochemical analysis of phospho LIMK1/2 (Thr508/505) staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0), then incubated with the antibody at RT and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with hematoxylin and mounted with DPX.



Immunofluorescent analysis of phospho LIMK1/2 (Thr508/505) staining in PC12 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at RT. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at RT in the dark. DAPI was used to stain the cell nuclei (blue).

RELATED PRODUCTS:

PAK2 Antibody (3443)

LIMK2 Antibody (3584)

LIMK1 Antibody (3433)

Phospho-Cofilin (Ser3) Antibody (A1267)

FOR RESEARCH USE ONLY! Not to be used on humans.