

LIMK-2 (phospho Ser283) Polyclonal Antibody

Catalog No: YP1028

Reactivity: Human; Mouse; Rat; Monkey

Applications: WB;IHC;IF;ELISA

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

P53671

O54785

Human Gene Id: 3985

Human Swiss Prot

No:

Mouse Gene Id: 16886

Mouse Swiss Prot

No:

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

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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)

72kD **Observed Band:**

Axon guidance; Fc gamma R-mediated phagocytosis; Regulates Actin and **Cell Pathway:**

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. 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., similarity: Contains 1 PDZ (DHR) domain., similarity: Contains 1

protein kinase domain., similarity: Contains 2 LIM zinc-binding

domains., subcellular location: Isoform LIMK2a is distributed in the cytoplasm and the nucleus., subcellular location: Isoform LIMK2b occurs mainly in the cytoplasm and is scarcely translocated to the nucleus., subunit: Binds ROCK1 and LKAP. Interacts with PARD3. Interacts with NISCH., tissue specificity: Highest expression in the placenta; moderate level in liver, lung, kidney, and pancreas. LIMK2a is

found to be more abundant then LIMK2b in liver, col

Subcellular Cytoplasm, cytoskeleton, spindle. Cytoplasm, cytoskeleton, microtubule Location:

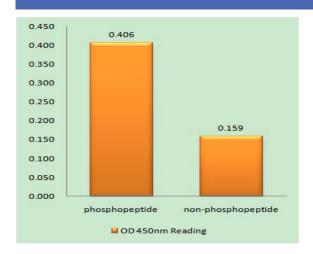
organizing center, centrosome .; [Isoform LIMK2a]: Cytoplasm . Nucleus .; [Isoform LIMK2b]: Cytoplasm . Cytoplasm, perinuclear region . Nucleus . Mainly

present in the cytoplasm and is scarcely translocated to the nucleus. .

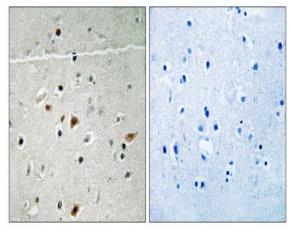
Hepatoma, Lung, Ovary, **Expression:**



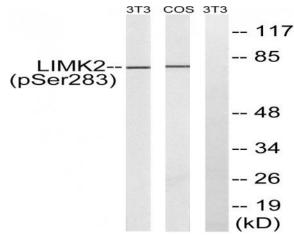
Products Images



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.