



LIMK-2 (phospho Ser283) Polyclonal Antibody

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| Catalog No | YP-Ab-14539 |
| Isotype | IgG |
| Reactivity | Human;Mouse;Rat;Monkey |
| Applications | WB;IHC;IF;ELISA |
| Gene Name | LIMK2 |
| Protein Name | LIM domain kinase 2 |
| 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 |
| Purification | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. |
| Dilution | WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200 |
| Concentration | 1 mg/ml |
| Purity | ≥90% |
| Storage Stability | -20°C/1 year |
| Synonyms | LIMK2; LIM domain kinase 2; LIMK-2 |
| Observed Band | 72kD |
| Cell Pathway | 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. . |
| Tissue Specificity | Hepatoma,Lung,Ovary, |
| 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 than LIMK2b in liver, col |



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],

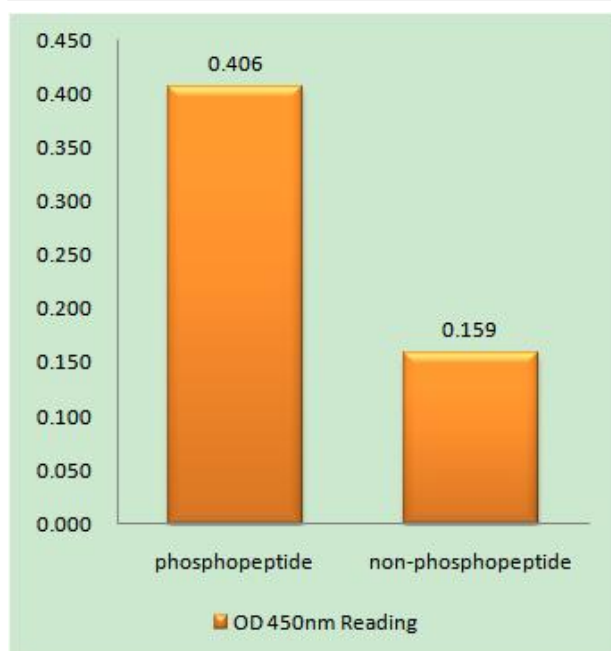
matters needing attention

Avoid repeated freezing and thawing!

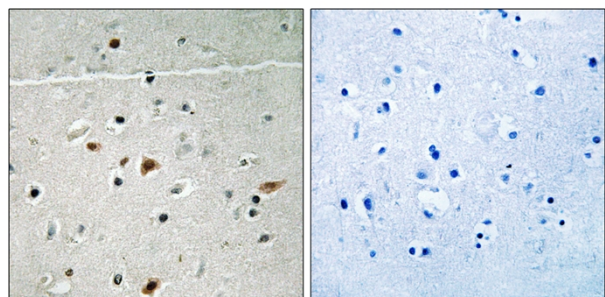
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

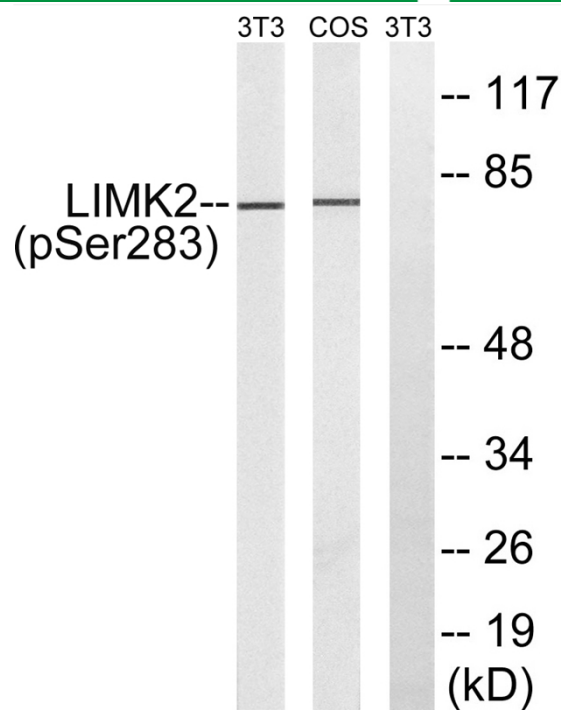
Products Images



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 phosphopeptide.



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