

LIMK2 Antibody

Rabbit Polyclonal Antibody Catalog # ABV10429

Specification

LIMK2 Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype
Calculated MW

WB
P53671
NP_001026971
Human, Mouse, Rat
Rabbit
Polyclonal
Rabbit IgG
72232

LIMK2 Antibody - Additional Information

Gene ID 3985

Application & Usage

Western blotting (1-4 μ g/ml). However, the optimal conditions should be determined individually. The antibody detects 70 kDa LIMK2 protein. It does not cross-react with LIMK1.

Other Names

EC 2.7.11.1, LIMK-2, LIM domain kinase 2, LIMK

Target/Specificity

LIMK2

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

 $100 \mu g$ (0.5 mg/ml) peptide affinity purified rabbit polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA, 0.02% thimerosal.

Handling

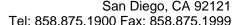
The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions





LIMK2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

LIMK2 Antibody - Protein Information

Name LIMK2

Function

Serine/threonine-protein kinase that plays an essential role in the regulation of actin filament dynamics (PubMed:10436159, PubMed:11018042). Acts downstream of several Rho family GTPase signal transduction pathways (PubMed:10436159, PubMed:11018042). Involved in astral microtubule organization and mitotic spindle orientation during early stages of mitosis by mediating phosphorylation of TPPP (PubMed: 22328514). Displays serine/threonine-specific phosphorylation of myelin basic protein and histone (MBP) in vitro (PubMed: 8537403). Suppresses ciliogenesis via multiple pathways; phosphorylation of CFL1, suppression of directional trafficking of ciliary vesicles to the ciliary base, and by facilitating YAP1 nuclear localization where it acts as a transcriptional corepressor of the TEAD4 target genes AURKA and PLK1 (PubMed:25849865).

Cellular Location

Cytoplasm, cytoskeleton, spindle. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome [Isoform LIMK2b]: Cytoplasm. Cytoplasm, perinuclear region. Nucleus Note=Mainly present in the cytoplasm and is scarcely translocated to the nucleus.

LIMK2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

LIMK2 Antibody - Images

LIMK2 Antibody - Background

LIM kinases (LIMK1 and LIMK2) are serine/threnine kinases that have two zinc finger motifs, known as LIM motifs in their N-terminal regulatory domain. LIM kinases are involved in actin cytoskeleton regulation thro µgh Rho-family GTPases and downstream kinases PAKs and ROCK. PAK1 and ROCK phosphorylate LIMK1 and LIMK2, which increases the activity of the kinases. Activated LIM kinases inhibit the actin depolymerization activity of cofilin by phosphorylation at the N-terminus of Cofilin.