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Anti-LIMK1/2 Antibody
Rabbit polyclonal antibody to LIMK1/2
Catalog # AP60022

Specification

Anti-LIMK1/2 Antibody - Product Information

Application	**WB**
Primary Accession	P53667
Other Accession	P53668
Reactivity	**Human, Mouse, Rat, Chicken, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**72585**

Anti-LIMK1/2 Antibody - Additional Information

Gene ID 3984

Other Names
LIMK; LIM domain kinase 1; LIMK-1

Target/Specificity
Recognizes endogenous levels of LIMK1/2 protein.

Dilution
WB~~WB (1/500 - 1/1000), IP (1/10 - 1/100)

Format
Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage
Store at -20 °C.Stable for 12 months from date of receipt

Anti-LIMK1/2 Antibody - Protein Information

Name LIMK1

Synonyms LIMK

Function
Serine/threonine-protein kinase that plays an essential role in the regulation of actin filament dynamics. Acts downstream of several Rho family GTPase signal transduction pathways (PubMed:10436159, PubMed:11832213, PubMed:12807904, PubMed:15660133, PubMed:16230460,

PubMed:18028908, PubMed:22328514, PubMed:23633677). Activated by upstream kinases including ROCK1, PAK1 and PAK4, which phosphorylate LIMK1 on a threonine residue located in its activation loop (PubMed:10436159). LIMK1 subsequently phosphorylates and inactivates the actin binding/depolymerizing factors cofilin-1/CFL1, cofilin-2/CFL2 and destrin/DSTN, thereby preventing the cleavage of filamentous actin (F-actin), and stabilizing the actin cytoskeleton (PubMed:11832213, PubMed:15660133, PubMed:16230460, PubMed:23633677). In this way LIMK1 regulates several actin-dependent biological processes including cell motility, cell cycle progression, and differentiation (PubMed:11832213, PubMed:15660133, PubMed:16230460, PubMed:23633677). Phosphorylates TPPP on serine residues, thereby promoting microtubule disassembly (PubMed:18028908). Stimulates axonal outgrowth and may be involved in brain development (PubMed:18028908).

Cellular Location
Cytoplasm. Nucleus. Cytoplasm, cytoskeleton. Cell projection, lamellipodium {ECO:0000250|UniProtKB:P53668} Note=Predominantly found in the cytoplasm. Localizes in the lamellipodium in a CDC42BPA, CDC42BPB and FAM89B/LRAP25-dependent manner. {ECO:0000250|UniProtKB:P53668}

Tissue Location
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

Anti-LIMK1/2 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

Anti-LIMK1/2 Antibody - Images

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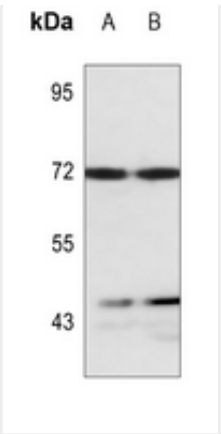

Western blot analysis of LIMK1/2 expression in Hela (A), DLD (B) whole cell lysates.

Anti-LIMK1/2 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human LIMK1/2. The exact sequence is proprietary.