

Product Datasheet

LIMK1 Polyclonal Antibody GRP491

Description

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. Activated by upstream kinases including ROCK1, PAK1 and PAK4, which phosphorylate LIMK1 on a threonine residue located in its activation loop. 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. In this way LIMK1 regulates several actin-dependent biological processes including cell motility, cell cycle progression, and differentiation. Phosphorylates TPPP on serine residues, thereby promoting microtubule disassembly. Stimulates axonal outgrowth and may be involved in brain development. Isoform 3 has a dominant negative effect on actin cytoskeletal changes. Required for atypical chemokine receptor ACKR2-induced phosphorylation of cofilin (CFL1).

Species/Host

Rabbit

Reactivity

Human, Mouse, Rat

Conjugation

Unconjugated

Tested Applications

IHC-P, WB

Immunogen

KLH conjugated synthetic peptide derived from human LIMK1 (public_immunogen_range: 465-512/647)

Form/Appearance

Aqueous buffered solution containing 1% BSA, 50% glycerol and 0.09% sodium azide.

Concentration

1µg/ul

Storage

Store at -20°C for 12 months.

Note

For research use only.

Isotype

IgG

Clonality

Polyclonal

Purity

Purified by Protein A.

Uniprot ID

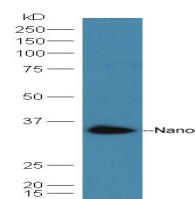
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Entrez

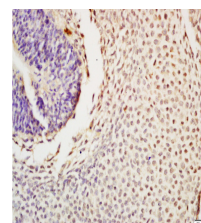
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Dilution Range

WB: 1:300-1000, IHC-P: 1:200-400



WB of GRP491



IHC-P of GRP491