

## **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).

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WB of GRP491

IHC-P of GRP491

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	1ug/ul
Storage	Store at -20°C for 12 months.
Note	For research use only.
Isotype	lgG
Clonality	Polyclonal
Purity	Purified by Protein A.
Uniprot ID	P53667
Entrez	3984
Dilution Range	WB: 1:300-1000, IHC-P: 1:200-400