

# Datasheet for ABIN7158355

# anti-LIM Domain Kinase 1 antibody (AA 179-320) (Biotin)



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Overview	
Quantity:	100 μg
Target:	LIM Domain Kinase 1 (LIMK1)
Binding Specificity:	AA 179-320
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This LIM Domain Kinase 1 antibody is conjugated to Biotin
Application:	ELISA
Product Details	

Immunogen:	Recombinant Human LIM domain kinase 1 protein (179-320AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

### **Target Details**

Target:	LIM Domain Kinase 1 (LIMK1)
Alternative Name:	LIMK1 (LIMK1 Products)
Background:	Background: 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).

Aliases: EC 2.7.11.1 antibody, LIM domain kinase 1 antibody, LIM motif-containing protein

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UniProt:

P53667

Pathways:

Caspase Cascade in Apoptosis, Regulation of Cell Size, CXCR4-mediated Signaling Events

# **Application Details**

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

#### Handling

Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, pH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.