

## Datasheet for ABIN680524

## anti-LIM Domain Kinase 1 antibody (AA 451-550) (Cy7)



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Quantity:	100 μL	
Target:	LIM Domain Kinase 1 (LIMK1)	
Binding Specificity:	AA 451-550	
Reactivity:	Human, Mouse, Rat	
Host:	Rabbit	
Clonality:	Polyclonal	
Conjugate:	This LIM Domain Kinase 1 antibody is conjugated to Cy7	
Application:	Western Blotting (WB), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p))	
Product Details		
Immunogen:	KLH conjugated synthetic peptide derived from human LIMK1	
Isotype:	IgG	
Cross-Reactivity:	Human, Mouse, Rat	
Predicted Reactivity:	Cow,Rabbit	
Purification:	Purified by Protein A.	
Purification: Target Details	Purified by Protein A.	
	LIM Domain Kinase 1 (LIMK1)	

## Target Details

Background:	Synonyms: LIMK, LIMK-1, LIM domain kinase 1, LIMK1		
	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).		
Gene ID:	3984		
UniProt:	P53667		
Pathways:	Caspase Cascade in Apoptosis, Regulation of Cell Size, CXCR4-mediated Signaling Events		
Application Details			
Application Notes:	IF(IHC-P) 1:50-200		
	IF(IHC-F) 1:50-200		
	IF(ICC) 1:50-200		
Restrictions:	For Research Use only		
Handling			
Format:	Liquid		
Concentration:	1 μg/μL		
Buffer:	Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % Proclin300 and		
	50 % Glycerol.		
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		

## Handling

Storage Comment:	Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles.
Expiry Date:	12 months