

Datasheet for ABIN680518

**anti-LIM Domain Kinase 1 antibody (AA 451-550)**[Go to Product page](#)

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## Overview

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 un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

## 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.

## Target Details

Target:	LIM Domain Kinase 1 (LIMK1)
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## Target Details

Alternative Name:	LIMK1 ( <a href="#">LIMK1 Products</a> )
Background:	<p>Synonyms: LIMK, LIMK-1, LIM domain kinase 1, LIMK1</p> <p>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).</p>
Gene ID:	3984
UniProt:	<a href="#">P53667</a>
Pathways:	<a href="#">Caspase Cascade in Apoptosis</a> , <a href="#">Regulation of Cell Size</a> , <a href="#">CXCR4-mediated Signaling Events</a>

## Application Details

Application Notes:	WB 1:300-5000 ELISA 1:500-1000 IHC-P 1:200-400 IHC-F 1:100-500 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:	0.01M TBS( pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.

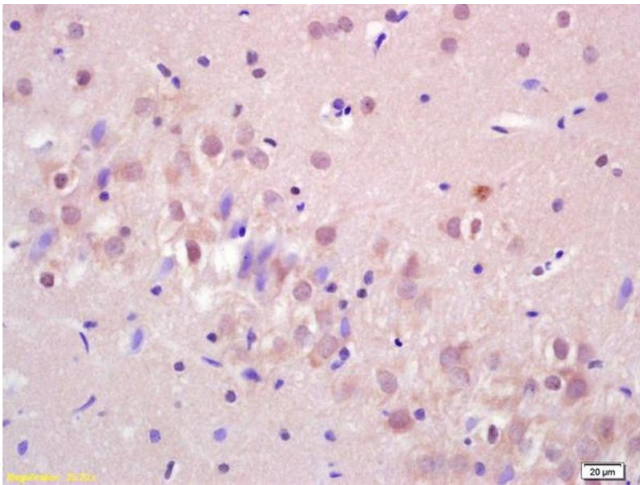
## Handling

Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

## Publications

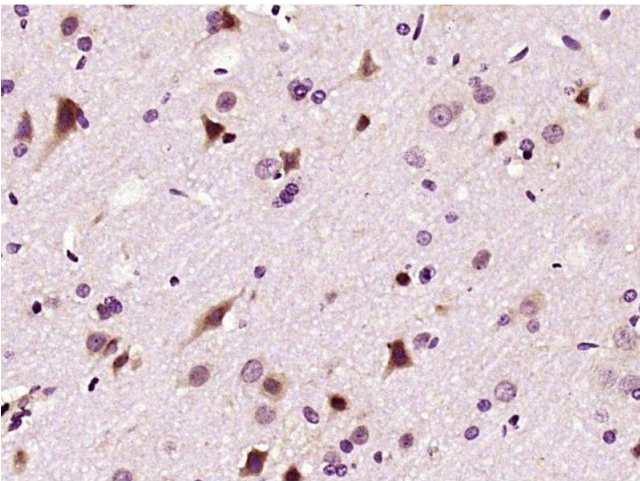
Product cited in:	Zhou, Liu, Luo, Zhou, Xia, Chen, Zhou, Zou, Cao, Cao: "MiR-20a inhibits cutaneous squamous cell carcinoma metastasis and proliferation by directly targeting LIMK1." in: <b>Cancer biology &amp; therapy</b> , Vol. 15, Issue 10, pp. 1340-9, (2015) ( <a href="#">PubMed</a> ).
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## Images



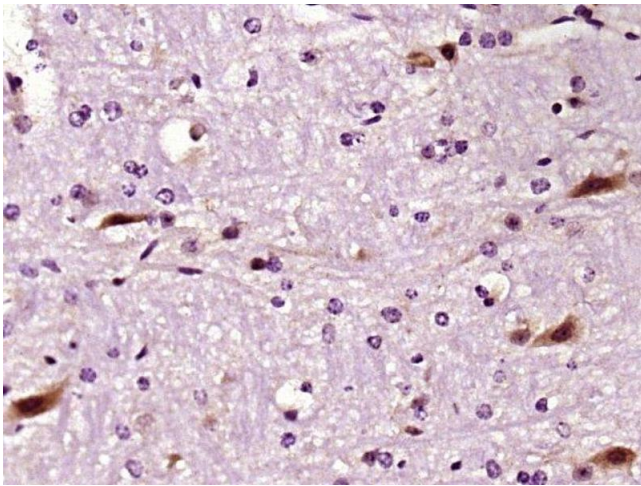
### Immunohistochemistry

**Image 1.** Formalin-fixed and paraffin embedded rat brain labeled with Anti-LIMK1 Polyclonal Antibody, Unconjugated (ABIN680518) at 1:200 followed by conjugation to the secondary antibody and DAB staining.



### Immunohistochemistry (Paraffin-embedded Sections)

**Image 2.** Paraformaldehyde-fixed, paraffin embedded rat brain, Antigen retrieval by boiling in sodium citrate buffer (pH6) for 15min, Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes, Blocking buffer (normal goat serum) at 37°C for 20min, Antibody incubation with LIMK1 Polyclonal Antibody (bs-2775R) at 1:400 overnight at 4°C, followed by a conjugated secondary and DAB staining.



#### Immunohistochemistry (Paraffin-embedded Sections)

**Image 3.** Paraformaldehyde-fixed, paraffin embedded mouse brain, Antigen retrieval by boiling in sodium citrate buffer (pH6) for 15min, Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes, Blocking buffer (normal goat serum) at 37°C for 20min, Antibody incubation with LIMK1 Polyclonal Antibody (bs-2775R) at 1:400 overnight at 4°C, followed by a conjugated secondary and DAB staining.