

Datasheet for ABIN680521

**anti-LIM Domain Kinase 1 antibody (AA 451-550) (Cy3)**[Go to Product page](#)

## 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 conjugated to Cy3                                                                         |
| 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.                                    |

## Target Details

|                   |                                          |
|-------------------|------------------------------------------|
| Target:           | LIM Domain Kinase 1 (LIMK1)              |
| Alternative Name: | LIMK1 ( <a href="#">LIMK1 Products</a> ) |

## Target Details

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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: | <p>IF(IHC-P) 1:50-200</p> <p>IF(IHC-F) 1:50-200</p> <p>IF(ICC) 1:50-200</p> |
| 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

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