

Datasheet for ABIN967742  
**anti-LCK antibody (AA 1-191)**



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## Overview

Quantity:	50 µg
Target:	LCK
Binding Specificity:	AA 1-191
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This LCK antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunoprecipitation (IP)

## Product Details

Immunogen:	Human Lck aa. 1-191
Clone:	28-Lck
Isotype:	IgG1
Cross-Reactivity:	Mouse (Murine), Rat (Rattus)
Characteristics:	<ol style="list-style-type: none"><li>1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.</li><li>2. Please refer to us for technical protocols.</li><li>3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.</li><li>4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.</li></ol>

## Product Details

Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
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## Target Details

Target:	LCK
Alternative Name:	Lck ( <a href="#">LCK Products</a> )
Background:	<p>The p56[lck] protein kinase is a member of the src family of cytoplasmic protein-tyrosine kinases (PTKs). Members of this family have several common features: 1) unique N-terminal domains, 2) attachment to cellular membranes through a myristylated N-terminus, and 3) homologous SH2, SH3, and catalytic domains. Within the src family of PTKs, lck, fyn, and Yes are expressed in T cells. The unique N-terminal domain of p56[lck] interacts with the cytoplasmic tails of the CD4 and CD8 cell surface glycoproteins. CD4 and CD8 bind to surface major histocompatibility complex (MHC) class II and class I molecules, respectively. These complexes interact with the T cell antigen receptor (TCR) in the early stages of T cell activation. In addition, an activated lck kinase increases responsiveness of some T cell hybridomas to antigen. The phosphorylation status and, therefore, the activity of p56[lck] kinase is regulated by the CD45 tyrosine protein phosphatase. Several studies suggest that lck has many functions critical to T cell development and activation. Mice lacking a functional lck gene are drastically impaired in the production of T lymphocytes. Variants of the human Jurkat T cell line that do not express p56[lck] exhibit a diminished response to stimulation of the T cell receptor. Evidence suggests that lck is directly upstream from PI3-kinase in the signal transduction cascade in T cell activation.</p>
Molecular Weight:	56 kDa
Pathways:	<a href="#">TCR Signaling</a> , <a href="#">Fc-epsilon Receptor Signaling Pathway</a> , <a href="#">EGFR Signaling Pathway</a> , <a href="#">Neurotrophin Signaling Pathway</a> , <a href="#">Transition Metal Ion Homeostasis</a> , <a href="#">Positive Regulation of Endopeptidase Activity</a> , <a href="#">CXCR4-mediated Signaling Events</a> , <a href="#">Thromboxane A2 Receptor Signaling</a>

## Application Details

Restrictions:	For Research Use only
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## Handling

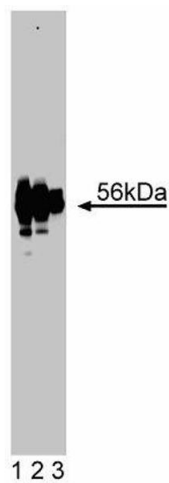
Format:	Liquid
Concentration:	250 µg/mL

## Handling

Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store undiluted at -20° C.

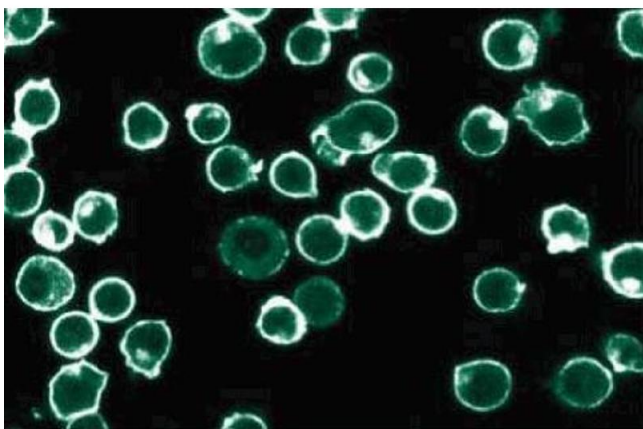
## Publications

- Product cited in:
- Zeyda, Staffler, Horejsi, Waldhausl, Stulnig: "LAT displacement from lipid rafts as a molecular mechanism for the inhibition of T cell signaling by polyunsaturated fatty acids." in: **The Journal of biological chemistry**, Vol. 277, Issue 32, pp. 28418-23, (2002) ([PubMed](#)).
- Maccalli, Pissarra, Vegetti, Sensi, Parmiani, Anichini: "Differential loss of T cell signaling molecules in metastatic melanoma patients' T lymphocyte subsets expressing distinct TCR variable regions." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 163, Issue 12, pp. 6912-23, (2000) ([PubMed](#)).
- Zhou, Magnuson, Cheng, Gadina, Frucht, Galon, Candotti, Geahlen, Changelian, OShea: "Hierarchy of protein tyrosine kinases in interleukin-2 (IL-2) signaling: activation of syk depends on Jak3; however, neither Syk nor Lck is required for IL-2-mediated STAT activation." in: **Molecular and cellular biology**, Vol. 20, Issue 12, pp. 4371-80, (2000) ([PubMed](#)).
- Xu, Littman: "A kinase-independent function of Lck in potentiating antigen-specific T cell activation." in: **Cell**, Vol. 74, Issue 4, pp. 633-43, (1993) ([PubMed](#)).
- Horak, Gress, Lucas, Horak, Waldmann, Bolen: "T-lymphocyte interleukin 2-dependent tyrosine protein kinase signal transduction involves the activation of p56lck." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 88, Issue 5, pp. 1996-2000, (1991) ([PubMed](#)).

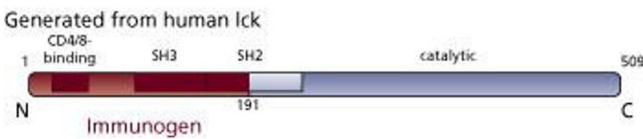


Western Blotting

**Image 1.** Western blot analysis of Lck on jurkat lysate. Lane 1: 1:5000, lane 2: 1:10000, lane 3: 1:20000 dilution of Lck.



**Image 2.** Jurkat



**Image 3.**

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN967742.