

## **Anti-Lck Monoclonal Antibody**

Catalog # ABO14512

## **Specification**

# **Anti-Lck Monoclonal Antibody - Product Information**

Application WB, IHC, IF, ICC, IP, FC

Primary Accession
Host
Rabbit
Isotype
Reactivity
Clonality
Format
Rabbit IgG
Human
Monoclonal
Liquid

**Description** 

Anti-Lck Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human.

# **Anti-Lck Monoclonal Antibody - Additional Information**

### **Gene ID 3932**

## **Other Names**

Tyrosine-protein kinase Lck, 2.7.10.2, Leukocyte C-terminal Src kinase, LSK, Lymphocyte cell-specific protein-tyrosine kinase, Protein YT16, Proto-oncogene Lck, T cell-specific protein-tyrosine kinase, p56-LCK, LCK

### **Application Details**

WB 1:500-1:1000<br/>br>IHC 1:50-1:200<br/>br>ICC/IF 1:50-1:200<br/>br>IP 1:80<br/>br>FC 1:20

#### **Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

# **Immunogen**

A synthesized peptide derived from human Lck The Src family of protein tyrosine kinases, which includes Src, Lyn, Fyn, Yes, Lck, Blk, and Hck, are important in the regulation of growth and differentiation of eukaryotic cells. Src activity is regulated by tyrosine phosphorylation at two sites, but with opposing effects.

### **Purification**

Affinity-chromatography

Storage Store at -20°C for one year. For short term

storage and frequent use, store at 4°C for

up to one month. Avoid repeated

freeze-thaw cycles.

### **Anti-Lck Monoclonal Antibody - Protein Information**



### **Name LCK**

#### **Function**

Non-receptor tyrosine-protein kinase that plays an essential role in the selection and maturation of developing T-cells in the thymus and in the function of mature T-cells. Plays a key role in T-cell antigen receptor (TCR)-linked signal transduction pathways. Constitutively associated with the cytoplasmic portions of the CD4 and CD8 surface receptors. Association of the TCR with a peptide antigen- bound MHC complex facilitates the interaction of CD4 and CD8 with MHC class II and class I molecules, respectively, thereby recruiting the associated LCK protein to the vicinity of the TCR/CD3 complex. LCK then phosphorylates tyrosine residues within the immunoreceptor tyrosinebased activation motifs (ITAM) of the cytoplasmic tails of the TCR- gamma chains and CD3 subunits, initiating the TCR/CD3 signaling pathway. Once stimulated, the TCR recruits the tyrosine kinase ZAP70, that becomes phosphorylated and activated by LCK. Following this, a large number of signaling molecules are recruited, ultimately leading to lymphokine production. LCK also contributes to signaling by other receptor molecules. Associates directly with the cytoplasmic tail of CD2, which leads to hyperphosphorylation and activation of LCK. Also plays a role in the IL2 receptor-linked signaling pathway that controls the T-cell proliferative response. Binding of IL2 to its receptor results in increased activity of LCK. Is expressed at all stages of thymocyte development and is required for the regulation of maturation events that are governed by both pre-TCR and mature alpha beta TCR. Phosphorylates other substrates including RUNX3, PTK2B/PYK2, the microtubule-associated protein MAPT, RHOH or TYROBP. Interacts with FYB2 (PubMed:<a href="http://www.uniprot.org/citations/27335501" target=" blank">27335501</a>).

#### Cellular Location

Cell membrane; Lipid-anchor; Cytoplasmic side Cytoplasm, cytosol. Note=Present in lipid rafts in an inactive form.

### **Tissue Location**

Expressed specifically in lymphoid cells.

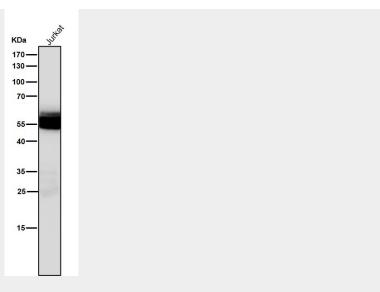
# Anti-Lck Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

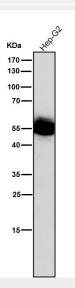
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Anti-Lck Monoclonal Antibody - Images

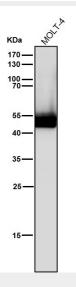




All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.

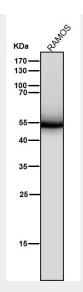


All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.

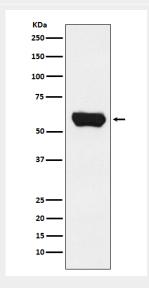


All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.





All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



Western blot analysis of Lck expression in Jurkat cell lysate.