

## Lck (phospho Tyr505) Polyclonal Antibody

Catalog No: YP0660

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: Lck

Fields: >>NF-kappa B signaling pathway;>>Osteoclast differentiation;>>Natural killer

cell mediated cytotoxicity;>>Th1 and Th2 cell differentiation;>>Th17 cell

differentiation;>>T cell receptor signaling pathway;>>Yersinia infection;>>Human T-cell leukemia virus 1 infection;>>PD-L1 expression and PD-1 checkpoint

pathway in cancer;>>Primary immunodeficiency

Gene Name: LCK

**Protein Name:** Tyrosine-protein kinase Lck

P06239

P06240

Human Gene ld: 3932

**Human Swiss Prot** 

No:

Mouse Gene Id: 16818

**Mouse Swiss Prot** 

No:

**Rat Gene Id:** 313050

Rat Swiss Prot No: Q01621

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

Lck around the phosphorylation site of Tyr505. AA range:460-509

**Specificity:** Phospho-Lck (Y505) Polyclonal Antibody detects endogenous levels of Lck

protein only when phosphorylated at Y505.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.



Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 56kD

**Cell Pathway:** Natural killer cell mediated cytotoxicity;T\_Cell\_Receptor;Primary

immunodeficiency;

**Background:** This gene is a member of the Src family of protein tyrosine kinases (PTKs). The

encoded protein is a key signaling molecule in the selection and maturation of developing T-cells. It contains N-terminal sites for myristylation and palmitylation, a PTK domain, and SH2 and SH3 domains which are involved in mediating protein-protein interactions with phosphotyrosine-containing and proline-rich motifs, respectively. The protein localizes to the plasma membrane and pericentrosomal vesicles, and binds to cell surface receptors, including CD4 and

CD8, and other signaling molecules. Multiple alternatively spliced variants encoding different isoforms have been described. [provided by RefSeg, Aug

2016].

**Function :** catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine

phosphate.,disease:A chromosomal aberration involving LCK is found in leukemias. Translocation t(1;7)(p34;q34) with TCRB.,domain:The SH2 domain

mediates interaction with SQSTM1. Interaction is regulated by Ser-59

phosphorylation., enzyme regulation: Inhibited by tyrosine

phosphorylation.,function:Tyrosine kinase that plays an essential role for the selection and maturation of developing T-cell in the thymus and in mature T-cell function. Is constitutively associated with the cytoplasmic portions of the CD4 and CD8 surface receptors and plays a key role in T-cell antigen receptor(TCR)-linked signal transduction pathways. Association of the TCR with a peptide antigenbound MHC complex facilitates the interaction of CD4 and CD8 with MHC class II

and class I molecules, respectively, and thereby recruits the associat

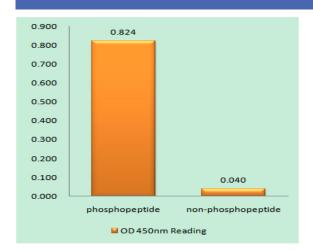
Subcellular Location:

 $\label{eq:continuous} \textbf{Cell membrane ; Lipid-anchor ; Cytoplasmic side . Cytoplasm, cytosol . Present}$ 

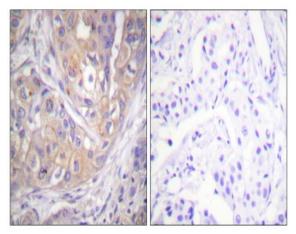
in lipid rafts in an inactive form. .

**Expression:** Expressed specifically in lymphoid cells.

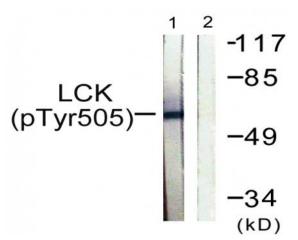
## **Products Images**



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Lck (Phospho-Tyr505) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using Lck (Phospho-Tyr505) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from Jurkat cells, using Lck (Phospho-Tyr505) Antibody. The lane on the right is blocked with the phospho peptide.