

LCK (aa39-52) Antibody (internal region, near N-Term)
Peptide-affinity purified goat antibody
Catalog # AF3715a

Specification

LCK (aa39-52) Antibody (internal region, near N-Term) - Product Information

Application	WB, E
Primary Accession	P06239
Other Accession	NP_005347.3 , 3932 , 16818 (mouse) , 313050 (rat)
Reactivity	Human, Rat
Predicted	Mouse, Pig, Dog
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	58001

LCK (aa39-52) Antibody (internal region, near N-Term) - 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

Dilution

WB~~1:1000
E~~N/A

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

LCK (aa39-52) Antibody (internal region, near N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

LCK (aa39-52) Antibody (internal region, near N-Term) - 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 (PubMed:2470098). Plays a key role in T-cell antigen receptor (TCR)-linked signal transduction pathways (PubMed:2470098). Constitutively associated with the cytoplasmic portions of the CD4 and CD8 surface receptors (PubMed:2470098). 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 (PubMed:2470098). LCK then phosphorylates tyrosine residues within the immunoreceptor tyrosine-based activation motifs (ITAM) of the cytoplasmic tails of the TCR-gamma chains and CD3 subunits, initiating the TCR-CD3 signaling pathway (PubMed:2470098, PubMed:40592325). 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:27335501).

Cellular Location

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

Tissue Location

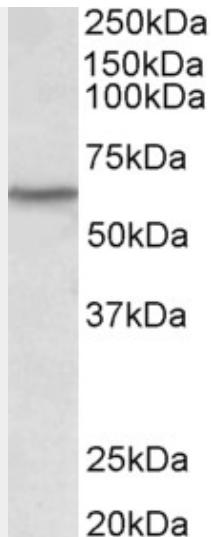
Expressed specifically in lymphoid cells.

LCK (aa39-52) Antibody (internal region, near N-Term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

LCK (aa39-52) Antibody (internal region, near N-Term) - Images



AF3715a (0.1 µg/ml) staining of Human Thymus lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF3715a (0.3 µg/ml) staining of Rat Thymus lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

LCK (aa39-52) Antibody (internal region, near N-Term) - Background

This antibody is not expected to cross-react with other tyrosine protein kinases. Reported variants represent identical protein: NP_005347.3, NP_001036236.1

LCK (aa39-52) Antibody (internal region, near N-Term) - References

Cellular functions regulated by Src family kinases. Thomas SM, Brugge JS. Annu Rev Cell Dev Biol. 1997;13:513-609. PMID: 9442882