
Anti-Lck

Cat #: HM1346
Mouse monoclonal IgG
0.2 µg/µl, store at 4 °C

For research use only

BACKGROUND

A total of eight membrane-associated tyrosine protein kinases have been identified within the Src gene family. These include c-Src, c-Yes, Fyn, Lck, Hck, Lyn, Blk and c-Fgr. Lymphocyte-specific protein tyrosine kinase Lck (p56lck) is expressed predominantly in T cells and its function is critical both for T cell development in the thymus and activation of mature T cells in the periphery by antigen. Lck 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. Lck phosphorylates tyrosine residues within the immunoreceptor tyrosine-based activation motifs (ITAMs) in the cytoplasmic tails of the TCR-chains and CD3 subunits. The phospho-ITAMs serve as docking sites for Src homology domain 2 (SH2)-containing molecules, predominantly ZAP-70 and Syk. The activity of Lck is known to be regulated by phosphorylation of two conserved tyrosine residues, Tyr-505 (equivalent to Tyr-529 in c-Src) and Tyr-394 (equivalent to Tyr-418 in c-Src).

SPECIFICITY

This antibody reacts with Lck of mouse, rat and human origin.

The antibody can be used in Western blotting, immunoprecipitation and immunohistochemistry.

IMMUNOGEN

A peptide mapping within the amino terminal domain of Lck of human origin.

STORAGE

This antibody is stable for 12 months when stored at 2-8°C.

REFERENCES

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3. Kim PW, Sun ZY, Blacklow SC, Wagner G, Eck MJ. A zinc clasp structure tethers Lck to T cell coreceptors CD4 and CD8. *Science.* 2003;301:1725-8.
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