

#11537

Lck (phospho-Tyr505) Antibody

Catalog: #11537-1 50µl **Orders:** order@signalwayantibody.com
#11537-2 100µl **Support:** tech@signalwayantibody.com
Storage: Store at -20°C/1 year **Web:** www.signalwayantibody.com



| Application | Species Reactivity | Source | Molecular Wt. |
|-------------|--------------------|---------------------|---------------|
| WB | Human Mouse | Rabbit Polyconal Ab | 56KD |

Description: Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.

Specificity: The antibody detects endogenous level of Lck only when phosphorylated at tyrosine 505.

Immunogen: Peptide sequence around phosphorylation site of tyrosine 505 (G-Q-Y(p)-Q-P) derived from Human Lck.

Formulation: Supplied at 1.0mg/mL in phosphate buffered saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

Synonyms: Lymphocyte cell-specific protein-tyrosine kinase p56-LCK LSK
T cell-specific protein-tyrosine kinase

Accession No.: Swiss-Prot#: P06239 NCBI Gene#: 3932
NCBI Protein#: NP_001036236.1

Background: 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 antigen-bound MHC complex facilitates the interaction of CD4 and CD8 with MHC class II and class I molecules, respectively, and thereby recruits the associated LCK to the vicinity of the TCR/CD3 complex. LCK then phosphorylates tyrosines residues within the immunoreceptor tyrosines-based activation motifs (ITAMs) in the cytoplasmic tails of the TCRgamma chains and CD3 subunits, initiating the TCR/CD3 signaling pathway. In addition, contributes to signaling by other receptor molecules. Associates directly with the cytoplasmic tail of CD2, and upon engagement of the CD2 molecule, LCK undergoes hyperphosphorylation and activation. Also plays a role in the IL2 receptor-linked signaling pathway that controls 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.

References:

Heck E, et al. (2006) J Virol. Oct; 80(20): 9934-9942
Michie AM, et al. (2000) Mol Biol Cell. May; 11(5): 1585-1595

Citation:

If you publish research using #11537 please [let us know](#).

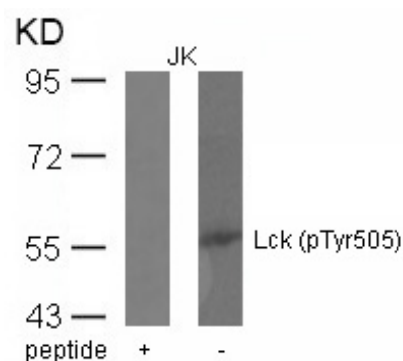
Related Pathway: NF-kappa B, Kinase/Phosphatases

Note: For western blotting, incubate membrane with diluted antibody in 5% nonfat milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

This product is for in vitro research use only and is not intended for use in humans or animals.

Recommended Dilutions:

Western blotting 1:500~1:1000



Western blot analysis of extracts from JK cells using Lck (phospho-Tyr505) Antibody #11537 and the same antibody preincubated with blocking peptide.