

Lck(phospho-Tyr505) Antibody

Catalog No: #11537

Package Size: #11537-1 50ul #11537-2 100ul #11537-4 25ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

Description

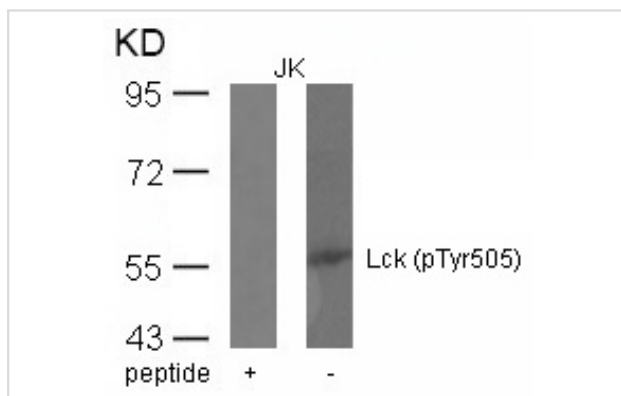
Product Name	Lck(phospho-Tyr505) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	WB
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of Lck only when phosphorylated at tyrosine 505.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of tyrosine 505 (G-Q-Y(p)-Q-P) derived from Human Lck.
Target Name	Lck
Modification	Phospho-Tyr505
Other Names	Lymphocyte cell-specific protein-tyrosine kinase; p56-LCK; LSK; T cell-specific protein-tyrosine kinase;
Accession No.	Swiss-Prot: P06239NCBI Protein: NP_001036236.1
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

Application Details

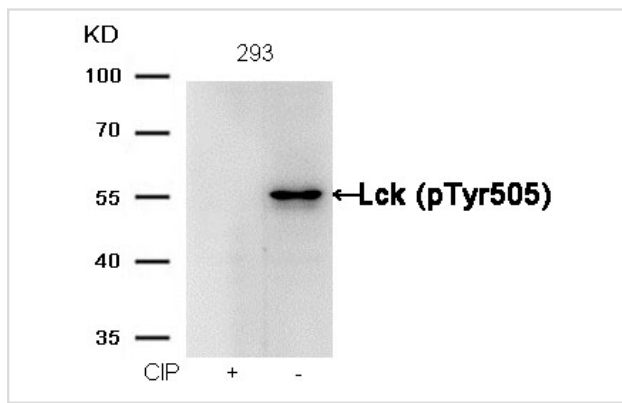
Predicted MW: 56kd

Western blotting: 1:500~1:1000

Images



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



Western blot analysis of extracts from 293 cells, treated with calf intestinal phosphatase (CIP), using Lck (phospho-Tyr505) Antibody #11537.

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.

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

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