



Magic™ Anti-LCK (Phospho Y393) polyclonal antibody (DPABH-01413)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description 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. Phosphorylates RUNX3.

Specificity	DPABH-01413 detects endogenous levels of Lck only when phosphorylated at Y393.
Target	LCK
Immunogen	Synthetic phospho-peptide against an internal region around Y393 of the Human Lck protein.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Purification	Immunogen affinity purified

Conjugate	Unconjugated
Applications	WB
Format	Liquid
Size	100 µg
Buffer	pH: 7.40; Constituents: 49% PBS, 50% Glycerol, 0.88% Sodium chloride. Note: PBS is without Mg2+ and Ca2+
Preservative	0.02% Sodium Azide
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.

GENE INFORMATION

Gene Name	FLT3 fms-related tyrosine kinase 4 [Homo sapiens]
Official Symbol	LCK
Synonyms	LCK; lymphocyte-specific protein tyrosine kinase; LSK; YT16; IMD22; p56lck; pp58lck; tyrosine-protein kinase Lck; leukocyte C-terminal Src kinase; p56(LSTRA) protein-tyrosine kinase; t cell-specific protein-tyrosine kinase; proto-oncogene tyrosine-protein kinase LCK; lymphocyte cell-specific protein-tyrosine kinase; T-lymphocyte specific protein tyrosine kinase p56lck;
Entrez Gene ID	2322
Protein Refseq	NP_004110.2
UniProt ID	P36888
Pathway	Adaptive Immune System; Atypical NF-kappaB pathway; CD28 co-stimulation; CD28 dependent Vav1 pathway
Function	ATP binding; ATPase binding; CD4 receptor binding; CD8 receptor binding