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Lck, Active recombinant protein

Lck (or leukocyte-specific protein tyrosine kinase)
Catalog # PBV11309r

Specification

Lck, Active recombinant protein - Product info

Primary Accession	P06239
Concentration	0.1
Calculated MW	84.0 kDa KDa

Lck, Active recombinant protein - Additional Info

Gene ID	3932
Gene Symbol	LCK

Other Names
Lck (or leukocyte-specific protein tyrosine kinase), Leukocyte C-terminal Src kinase, Short name=LSK, Lymphocyte cell-specific protein-tyrosine kinase, Protein YT16, Proto-oncogene Lck, T cell-specific protein-tyrosine kinase, p56-LCK

Source	Baculovirus (Sf9 insect cells)
Assay&Purity	SDS-PAGE; ≥90%
Assay2&Purity2	HPLC;
Recombinant	Yes

Format
Liquid

Storage
-80°C; Recombinant protein in storage buffer (50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 0.25 mM DTT, 0.1 mM EGTA, 0.1 mM EDTA, 0.1 mM PMSF, 30% glycerol).

Lck, Active recombinant protein - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Lck, Active recombinant protein - Images

Lck, Active recombinant protein - Background

Lck (p56lck) is a member of the src family of non-receptor tyrosine kinases. It was identified as a gene rearranged and overexpressed in the murine lymphoma LSTRA, most likely as a result of the

insertion of Moloney murine leukemia virus DNA immediately adjacent to the gene. Lck behaves as a proto-oncogene and can lead to cell transformation upon activation. A number of human cancer cell lines show overexpression of Lck, pointing to a possible role for this kinase in the initiation and maintenance of the transformed state in human cancers. Colon cancers and T-cell leukemias frequently show defective regulation of Lck expression and activity.Inappropriate T cell activation and proliferation have been identified as an early event in auto-immune disease. Lck plays a prominent role in T-cell development, activation, proliferation and survival. Lck is coupled to both the CD4 and CD8 antigens (which serve as receptors for nonpolymorphic regions of products of the major histocompatibility complex and have been implicated in the regulation of T-cell growth) in T-cells and phosphorylates CD3. Lck phosphorylates many cellular protein substrates as a result of T-cell receptor signaling cascade. This includes phosphorylation of proteins such as Ras GTPase-activating protein (RasGAP) and two RasGAP-associated proteins, p56(dok) and p62(dok).

Lck, Active recombinant protein - References

Koga Y.,et al.Eur. J. Immunol. 16:1643-1646(1986).
Perlmutter R.M.,et al.J. Cell. Biochem. 38:117-126(1988).
Rouer E.,et al.Gene 84:105-113(1989).
Wright D.D.,et al.Mol. Cell. Biol. 14:2429-2437(1994).
Vogel L.B.,et al.Biochim. Biophys. Acta 1264:168-172(1995).