

## Recombinant Human Lymphocyte Protein Tyrosine Kinase GST Active

<b>Catalog No.</b>	CRL102A CRL102B	<b>Quantity:</b>	5 µg 10 µg
<b>Alternate Names:</b>	YT16, p56lck, pp58lck, T-lymphocyte specific protein tyrosine kinase p56lck, p56 (LSTRA) protein-tyrosine kinase, protein tyrosine kinase, proto-oncogene tyrosine-protein kinase LCK		
<b>Description:</b>	<p>Recombinant full length human Lck containing N-terminal GST tag was expressed by baculovirus in Sf9 insect cells.</p> <p>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 mouse 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).</p>		
<b>Concentration:</b>	0.1 µg/µl		
<b>GeneID:</b>	3932		
<b>Protein Accession No:</b>	NM_005356		
<b>Source:</b>	Sf9 insect cells using baculovirus		
<b>Molecular Weight:</b>	84 kDa		
<b>Formulation:</b>	Recombinant protein in storage buffer (50 mM Tris-HCl + 150 mM NaCl + 0.25 mM DTT + 0.1 mM EGTA + 0.1 mM EDTA + 0.1 mM PMSF + 30% glycerol; pH 7.5).		
<b>Purity:</b>	≥90%		
<b>Specific Activity:</b>	239 nmol/min/mg: 239 nmol phosphate incorporated into MBP per minute per mg protein at 30°C for 15 minutes using a final concentration of 50 µM ATP (0.83 µCi/assay).		

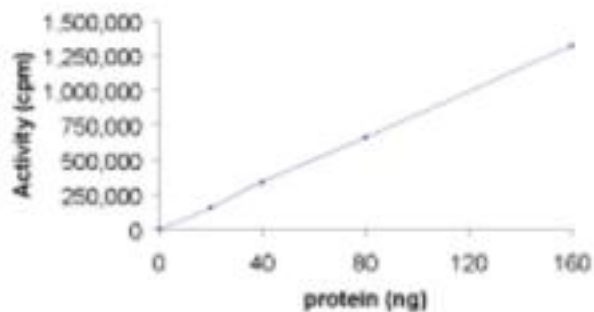


**Applications:** Kinase Assay, Western Blot

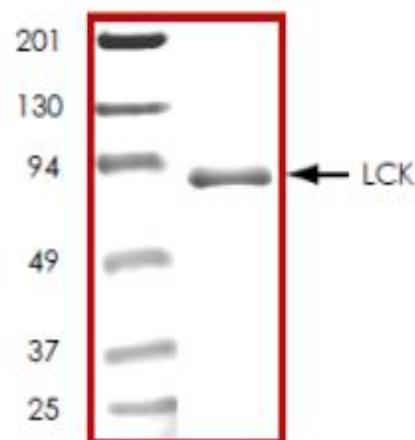
**Storage & Stability:** Store product frozen at or below -80°F. Stable for 1 year at -80°F as undiluted stock. Aliquot to avoid repeated thawing and freezing.

**Active Research Areas:** The LCK, Active product can be utilized in the following research areas, but not limited to: Cancer, Cytoplasmic Tyrosine Kinases, Inflammation, JAK/STAT Pathway, NfκB Pathway.

Specific Activity



Purity



NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

