

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Lck in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Lck Met1-Val66 Accession # P06239
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

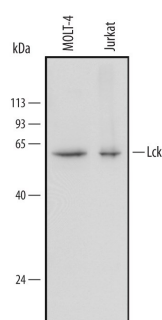
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.5 µg/mL	See Below
Immunohistochemistry	3-15 µg/mL	See Below
Simple Western	5 µg/mL	Jurkat human acute T cell leukemia cell line

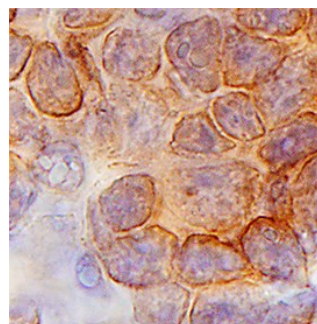
DATA

Western Blot



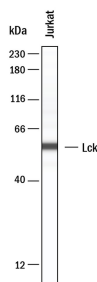
Detection of Human Lck by Western Blot. Western blot shows lysates of MOLT-4 human acute lymphoblastic leukemia cell line and Jurkat human acute T cell leukemia cell line. PVDF Membrane was probed with 0.5 µg/mL of Goat Anti-Human Lck Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3704) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for Lck at approximately 56 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

Immunohistochemistry



Lck in Human Thymus. Lck was detected in immersion fixed paraffin-embedded sections of human thymus using Goat Anti-Human Lck Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3704) at 3 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Goat IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC004). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to plasma membrane. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

Simple Western



Detection of Human Lck by Simple Western™. Simple Western lane view shows lysates of Jurkat human acute T cell leukemia cell line, loaded at 0.2 mg/mL. A specific band was detected for Lck at approximately 57 kDa (as indicated) using 5 µg/mL of Goat Anti-Human Lck Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3704). This experiment was conducted under reducing conditions and using the 12-230kDa separation system.



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Lck (p56lck) is a 56 kDa cytosolic phosphoprotein within the Src family of non-receptor tyrosine kinases. The 509 amino acid (aa) human Lck contains an SH3 domain (aa 61-121), an SH2 domain (aa 127-224) and a protein kinase domain (aa 251-259). Within aa 2-66, human Lck shares 89% aa sequence identity with mouse and rat Lck. A short (363 aa) isoform contains alternate sequence starting at aa 348, while a 539 aa isoform contains inserted sequence after aa 321. Lck interacts with T cell CD4 and CD8 molecules and plays a pivotal role in regulating T cell activation. It can be overexpressed in cancers and functions as an oncogene.