

Lck (3G177): sc-71500

BACKGROUND

Src is the human homolog of the v-Src gene of the Rous sarcoma virus, also known as avian sarcoma virus, or ASV. Src was the first proto-oncogenic, non-receptor tyrosine kinase characterized in human. By virtue of common structural motifs, the Src family is composed of nine members in vertebrates, including Src, Yes, Fgr, Frk, Fyn, Lyn, Hck, Lck and Blk. Src family kinases transduce signals that are involved in the control of a variety of cellular processes, including proliferation, differentiation, motility and adhesion. Src family kinases contain an amino terminal cell membrane anchor, followed by an SH3 domain and an SH2 domain that are involved in modular association and activation, respectively. Src family kinases are normally maintained in an inactive state and can be activated transiently during cellular events such as mitosis. Different subcellular localizations of Src family kinases may be important for the regulation of specific cellular processes, such as mitogenesis, cytoskeletal organization and membrane trafficking. The Fyn and Lck Src family tyrosine kinases play a key role in T cell antigen receptor (TCR) signaling. The human Lck gene maps to chromosome 1p34.3 and encodes a 509 amino acid protein.

REFERENCES

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4. Bjorge, J.D., Jakymiw, A. and Fujita, D.J. 2000. Selected glimpses into the activation and function of Src kinase. *Oncogene* 19: 5620-5635.
5. Korade-Mirnics, Z. and Corey, S.J. 2000. Src kinase-mediated signaling in leukocytes. *J. Leukoc. Biol.* 68: 603-613.
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CHROMOSOMAL LOCATION

Genetic locus: LCK (human) mapping to 1p34.3; Lck (mouse) mapping to 4 D2.2.

SOURCE

Lck (3G177) is a mouse monoclonal antibody raised against amino acids 1-225 of Lck of mouse origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 µg IgG_{2b} in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as phycoerythrin (sc-71500 PE) or fluorescein (sc-71500 FITC) conjugates for flow cytometry, 100 tests.

APPLICATIONS

Lck (3G177) is recommended for detection of Lck p56 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

Suitable for use as control antibody for Lck siRNA (h): sc-29392, Lck siRNA (m): sc-35799, Lck shRNA Plasmid (h): sc-29392-SH, Lck shRNA Plasmid (m): sc-35799-SH, Lck shRNA (h) Lentiviral Particles: sc-29392-V and Lck shRNA (m) Lentiviral Particles: sc-35799-V.

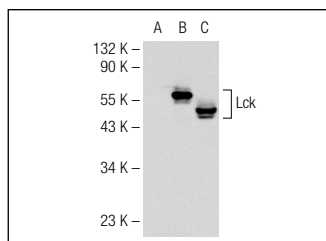
Molecular Weight of Lck: 56 kDa.

Positive Controls: Lck (h4): 293 Lysate: sc-158678, Lck (m): 293T Lysate: sc-125538 or HuT 78 whole cell lysate: sc-2208.

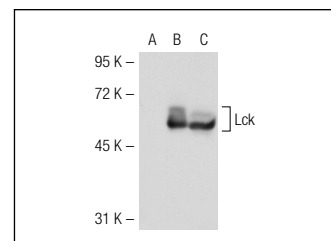
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Lck (3G177): sc-71500. Western blot analysis of Lck expression in non-transfected 293T: sc-110760 (A), human Lck transfected 293T: sc-158678 (B) and Jurkat (C) whole cell lysates.



Lck (3G177): sc-71500. Western blot analysis of Lck expression in non-transfected 293T: sc-117752 (A), mouse Lck transfected 293T: sc-125538 (B) and HuT 78 (C) whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.