

Lck (28): sc-135971

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 1p35.1 and encodes a 509 amino acid protein.

REFERENCES

1. Sakaguchi, A.Y. 1983. Genetic organization of human proto-oncogenes. *Prog. Clin. Biol. Res.* 119: 93-103.
2. Williams, J.C., et al. 1998. Insights into Src kinase functions: structural comparisons. *Trends Biochem. Sci.* 23: 179-184.

CHROMOSOMAL LOCATION

Genetic locus: LCK (human) mapping to 1p35.1; Lck (mouse) mapping to 4 D2.2.

SOURCE

Lck (28) is a mouse monoclonal antibody raised against amino acids 1-191 of Lck of human origin.

PRODUCT

Each vial contains 50 µg IgG₁ in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Lck (28) is recommended for detection of Lck 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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.

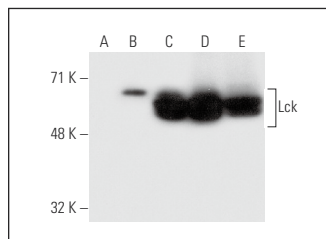
Molecular Weight of Lck: 56 kDa.

Positive Controls: Lck (m): 293T Lysate: sc-125538, Lck (h4): 293 Lysate: sc-158678 or Jurkat whole cell lysate: sc-2204.

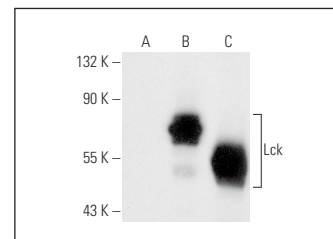
STORAGE

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

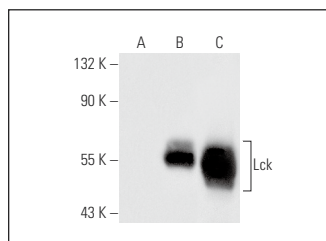
DATA



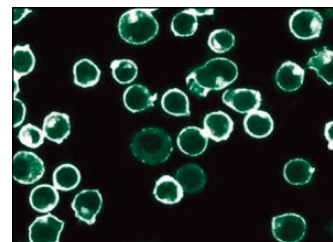
Lck (28): sc-135971. Western blot analysis of Lck expression in non-transfected 293T: sc-117752 (A), human Lck transfected 293T: sc-113336 (B), HuT 78 (C), MOLT-4 (D) and Ramos (E) whole cell lysates.



Lck (28): sc-135971. 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 (28): sc-135971. Western blot analysis of Lck expression in non-transfected 293T: sc-117752 (A), mouse Lck transfected 293T: sc-125538 (B) and Jurkat (C) whole cell lysates.



Lck (28): sc-135971. Immunofluorescence staining of Jurkat cells showing membrane staining.

SELECT PRODUCT CITATIONS

1. Kittipatarin, C., et al. 2010. The interaction of LCK and the CD4 co-receptor alters the dose response of T-cells to interleukin-7. *Immunol. Lett.* 131: 170-181.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.



See **Ep-CAM (C-10): sc-25308** for Ep-CAM antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.