**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**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

Lck (3A5) is a mouse monoclonal antibody raised against amino acids 1-225 of Lck of mouse origin.

**PRODUCT**

Each vial contains 200 µg IgG2b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Lck (3A5) is available conjugated to agarose (sc-433 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-433 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-433 PE), fluorescein (sc-433 FITC), Alexa Fluor® 488 (sc-433 AF488), Alexa Fluor® 546 (sc-433 AF546), Alexa Fluor® 594 (sc-433 AF594) or Alexa Fluor® 647 (sc-433 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-433 AF680) or Alexa Fluor® 790 (sc-433 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**STORAGE**

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

**APPLICATIONS**

Lck (3A5) 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), immunohistochemistry (including paraffin-embedded sections) (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: ALL-SIL whole cell lysate: sc-364356, CCRF-CEM cell lysate: sc-2225 or Jurkat whole cell lysate: sc-2204.

**DATA**

Lck (3A5): sc-433. Fluorescent western blot analysis of Lck expression in MOLT-4 (A), ALL-SIL (B), CCRF-CEM (C), Jurkat (D) and SUP-T1 (E) whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgG 2b BP-488: sc-64745S.

Lck (3A5): sc-433. Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing cytoplasmic and membrane staining of cells in white pulp.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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