

Lyn (44): sc-15

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 is 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 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. The human Lyn gene maps to chromosome 8q12.1 and encodes a 505 amino acid protein. Hematopoietic tissues predominantly express Lyn, which influences normal immunoglobulin production and regulation.

CHROMOSOMAL LOCATION

Genetic locus: LYN (human) mapping to 8q12.1; Lyn (mouse) mapping to 4 A1.

SOURCE

Lyn (44) is available as either rabbit (sc-15) or goat (sc-15-G) polyclonal affinity purified antibody raised against a peptide mapping at the N-terminus of Lyn of human origin.

PRODUCT

Each vial contains either 100 µg (sc-15) or 200 µg (sc-15-G) IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-15 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as phycoerythrin conjugate for flow cytometry, sc-15 PE, 100 tests and as agarose (sc-15 AC) conjugate for immunoprecipitation, 500µg/0.25 ml agarose in 1 ml.

APPLICATIONS

Lyn (44) is recommended for detection of Lyn p56/p53 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), flow cytometry (1 µg per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000). Lyn (44) is also recommended for detection of Lyn p56/p53 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Lyn siRNA (h): sc-29393, Lyn siRNA (m): sc-35828, Lyn shRNA Plasmid (h): sc-29393-SH, Lyn shRNA Plasmid (m): sc-35828-SH, Lyn shRNA (h) Lentiviral Particles: sc-29393-V and Lyn shRNA (m) Lentiviral Particles: sc-35828-V.

Molecular Weight of Lyn isoforms: 53/56 kDa.

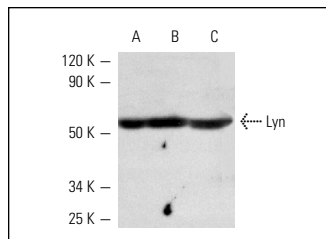
RESEARCH USE

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

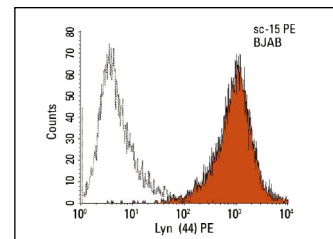
STORAGE

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

DATA



Lyn (44)-G: sc-15-G. Western blot analysis of Lyn expression in BJAB (A), HL-60 (B) and 3611-RF (C) whole cell lysates.



Lyn (44) PE: sc-15 PE. Intracellular FCM analysis of fixed and permeabilized BJAB cells. Black line histogram represents the isotype control, normal rabbit IgG: sc-3871.

SELECT PRODUCT CITATIONS

- Lee, A.W., et al. 2000. Both Src-dependent and -independent mechanisms mediate phosphatidylinositol 3-kinase regulation of colony-stimulating factor 1-activated mitogen-activated protein kinases in myeloid progenitors. *Mol. Cell. Biol.* 20: 6779-6798.
- Kitaura, J., et al. 2000. Akt-dependent cytokine production in mast cells. *J. Exp. Med.* 192: 729-740.
- Kawakami, Y., et al. 2000. Redundant and opposing functions of two tyrosine kinases, Btk and Lyn, in mast cell activation. *J. Immunol.* 165: 1210-1219.
- Zhang, Q.G., et al. 2010. Positive modulation of AMPA receptors prevents downregulation of GluR2 expression and activates the Lyn-ERK1/2-CREB signaling in rat brain ischemia. *Hippocampus* 20: 65-77.
- He, Y., et al. 2011. The non-receptor tyrosine kinase Lyn controls neutrophil adhesion by recruiting the CrkL-C3G complex and activating Rap1 at the leading edge. *J. Cell Sci.* 124: 2153-2164.
- Tibaldi, E., et al. 2011. Interaction between the SH3 domain of Src family kinases and HTLV-1 p13's proline rich motif: a novel mechanism underlying delivery of Src family kinases to mitochondria. *Biochem. J.* 439: 505-516.
- Wöhrle, F.U., et al. 2012. Gab2 signaling in chronic myeloid leukemia cells confers resistance to multiple Bcr-Abl inhibitors. *Leukemia* 27: 118-129.
- Thomé, C.H., et al. 2012. Linker for activation of T-cell family member2 (LAT2) a lipid raft adaptor protein for AKT signaling, is an early mediator of alkylphospholipid anti-leukemic activity. *Mol. Cell. Proteomics* 11: 1898-1912.
- Narute, P.S., et al. 2012. Nef alleles from all major HIV-1 clades activate Src-family kinases and enhance HIV-1 replication in an inhibitor-sensitive manner. *PLoS ONE* 7: e32561.
- Veatch, S.L., et al. 2012. Quantitative nanoscale analysis of IgE-FcεRI clustering and coupling to early signaling proteins. *J. Phys. Chem. B* 116: 6923-6935.