SANTA CRUZ BIOTECHNOLOGY, INC.

Lyn (42): sc-136259

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.

REFERENCES

1. Sakaguchi, A.Y., et al. 1982. Organization of human proto-oncogenes. Am. J. Hum. Genet. 34: 175.
2. Draberova, L., et al. 1996. Thy-1-mediated activation of rat mast cells: the role of Thy-1 membrane microdomains. Immunology 87: 141-148.
3. Amoui, M., et al. 1997. Direct interaction of Syk and Lyn protein tyrosine kinases in rat basophilic leukemia cells activated via type I Fc ε receptors. Eur. J. Immunol. 27: 321-328.
4. Hibbs, M.L. and Dunn, A.R. 1997. Lyn, a Src-like tyrosine kinase. Int. J. Biochem. Cell Biol. 29: 397-400.
5. Williams, J.C., et al. 1998. Insights into Src kinase functions: structural comparisons. Trends Biochem. Sci. 23: 179-184.
6. Tatosyan, A.G. and Mizenina, O.A. 2000. Kinases of the Src family: structure and functions. Biochemistry 65: 49-58.
7. Bjorge, J.D., et al. 2000. Selected glimpses into the activation and function of Src kinase. Oncogene 19: 5620-5635.

CHROMOSOMAL LOCATION

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

SOURCE

Lyn (42) is a mouse monoclonal antibody raised against amino acids 1-138 of Lyn of human origin.

PRODUCT

Each vial contains 50 µg IgG_1 in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

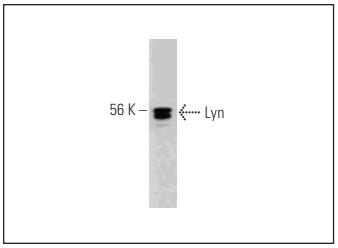
Lyn (42) is recommended for detection of Lyn of mouse, rat, human and canine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for 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.

Positive Controls: MCF7 whole cell lysate: sc-2206, BJAB whole cell lysate: sc-2207 or HL-60 whole cell lysate: sc-2209.

DATA



Lyn (42): sc-136259. Western blot analysis of Lyn expression in HEL (human erythroleukemia cell line) whole cell lysate.

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.

CONJUGATES

See **Lyn (H-6): sc-7274** for Lyn antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.