

Lyn (G-7): sc-376100

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. Hibbs, M.L. and Dunn, A.R. 1997. Lyn, a Src-like tyrosine kinase. *Int. J. Biochem. Cell Biol.* 29: 397-400.

CHROMOSOMAL LOCATION

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

SOURCE

Lyn (G-7) is a mouse monoclonal antibody raised against amino acids 1-70 mapping at the N-terminus of Lyn of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Lyn (G-7) is recommended for detection of Lyn of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

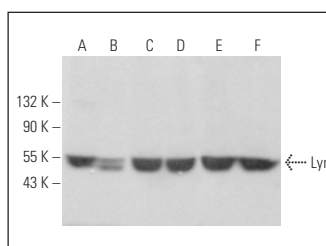
Molecular Weight of Lyn isoforms: 53/56 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, HeLa whole cell lysate: sc-2200 or Raji whole cell lysate: sc-364236.

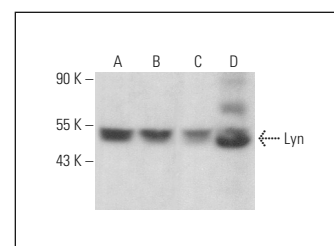
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Lyn (G-7): sc-376100. Western blot analysis of Lyn expression in HeLa (A), NIH/3T3 (B), HEL 92.1.7 (C), K-562 (D), Raji (E) and A-431 (F) whole cell lysates.



Lyn (G-7): sc-376100. Western blot analysis of Lyn expression in MCF7 (A), Hep G2 (B) and C6 (C) whole cell lysates and rat liver tissue extract (D).

SELECT PRODUCT CITATIONS

1. Huang, R., et al. 2016. Directed evolution of a highly specific FN3 monobody to the SH3 domain of human Lyn tyrosine kinase. *PLoS ONE* 11: e0145872.
2. Ko, T.K., et al. 2016. The BIM deletion polymorphism: a paradigm of a permissive interaction between germline and acquired TKI resistance factors in chronic myeloid leukemia. *Oncotarget* 7: 2721-2733.
3. Chang, H.W., et al. 2023. Thalidomide attenuates mast cell activation by upregulating SHP-1 signaling and interfering with the action of CRBN. *Cells* 12: 469.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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



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.