

# Lyn (2H8D7): sc-101849

## 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

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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  $\epsilon$  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.

## SOURCE

Lyn (2H8D7) is a mouse monoclonal antibody raised against purified truncated recombinant Lyn of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 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 (2H8D7) is recommended for detection of Lyn of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] 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 shRNA Plasmid (h): sc-29393-SH and Lyn shRNA (h) Lentiviral Particles: sc-29393-V.

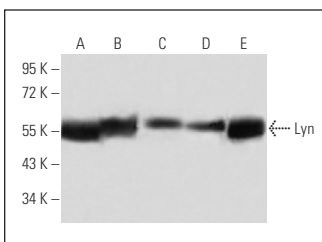
Molecular Weight of Lyn isoforms: 53/56 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, Raji whole cell lysate: sc-364236 or Ramos cell lysate: sc-2216.

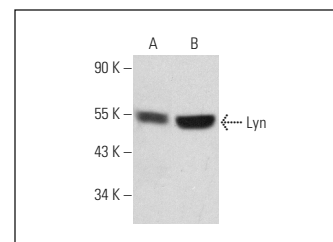
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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).

## DATA



Lyn (2H8D7): sc-101849. Western blot analysis of Lyn expression in HL-60 (A), L540 (B), SLLP-M2 (C), SEM (D) and Ramos (E) whole cell lysates.



Lyn (2H8D7): sc-101849. Western blot analysis of Lyn expression in HEL 92.1.7 (A) and Raji (B) whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://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.