

Lyn (H-6): sc-7274

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 (H-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 40-70 near the N-terminus of Lyn of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Lyn (H-6) is available conjugated to agarose (sc-7274 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-7274 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-7274 PE), fluorescein (sc-7274 FITC), Alexa Fluor® 488 (sc-7274 AF488), Alexa Fluor® 546 (sc-7274 AF546), Alexa Fluor® 594 (sc-7274 AF594) or Alexa Fluor® 647 (sc-7274 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-7274 AF680) or Alexa Fluor® 790 (sc-7274 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-7274 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

Lyn (H-6) 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

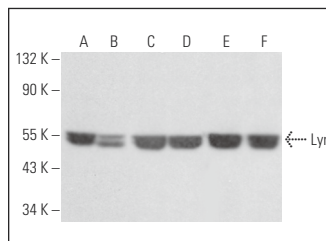
Suitable for use as control antibody for Lyn siRNA (h): sc-29393, Lyn siRNA (m): sc-35828, Lyn shRNA Plasmid (h): sc-29393-SH, Lyn shRNA Plasmid (m): sc-35828-SH, Lyn shRNA (h) Lentiviral Particles: sc-29393-V and Lyn shRNA (m) Lentiviral Particles: sc-35828-V.

Molecular Weight of Lyn isoforms: 53/56 kDa.

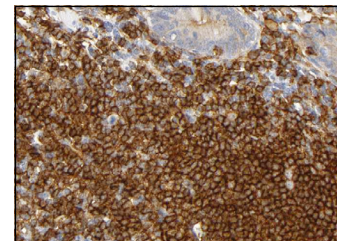
STORAGE

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

DATA



Lyn (H-6): sc-7274. 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 (H-6): sc-7274. Immunoperoxidase staining of formalin fixed, paraffin-embedded human appendix tissue showing membrane staining of lymphoid cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

SELECT PRODUCT CITATIONS

- Sumitomo, M., et al. 2000. Neutral endopeptidase inhibits prostate cancer cell migration by blocking focal adhesion kinase signaling. *J. Clin. Invest.* 106: 1399-1407.
- Xu, W., et al. 2012. SRC kinase regulation in progressively invasive cancer. *PLoS ONE* 7: e48867.
- Aoyama, K., et al. 2013. Formation of long and winding nuclear F-Actin bundles by nuclear c-Abl tyrosine kinase. *Exp. Cell Res.* 319: 3251-3268.
- Morinaga, T., et al. 2014. Activation of Lyn tyrosine kinase through decreased membrane cholesterol levels during a change in its membrane distribution upon cell detachment. *J. Biol. Chem.* 289: 26327-26343.
- Kanno, T., et al. 2015. Fumagillin, a potent angiogenesis inhibitor, induces Kaposi sarcoma-associated herpesvirus replication in primary effusion lymphoma cells. *Biochem. Biophys. Res. Commun.* 463: 1267-1272.
- Osawa, M., et al. 2016. Establishing and characterizing a new primary effusion lymphoma cell line harboring Kaposi's sarcoma-associated herpesvirus. *Infect. Agents Cancer* 11: 37.
- Kim, D.K., et al. 2017. Interaction of DJ-1 with Lyn is essential for IgE-mediated stimulation of human mast cells. *J. Allergy Clin. Immunol.* 142: 195-206.
- Park, Y.H., et al. 2018. Repositioning of anti-cancer drug candidate, AZD7762, to an anti-allergic drug suppressing IgE-mediated mast cells and allergic responses via the inhibition of Lyn and Fyn. *Biochem. Pharmacol.* 154: 270-277.

RESEARCH USE

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

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