

# Fyn (FYN-59): sc-73388

## BACKGROUND

Src is the human homolog of the v-Src gene of the Rous sarcoma virus, also called avian sarcoma virus or ASV. Src was 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. Different subcellular localizations of Src-family kinases may be important for the regulation of specific cellular processes such as mitogenesis, cyto-skeletal organization and membrane trafficking. Fyn and Lck kinases play a key role in T cell antigen receptor (TCR) signaling. The human Fyn gene maps to chromosome 6q21 and encodes a 537 amino acid protein.

## REFERENCES

1. Sakaguchi, A.Y., et al. 1982. Organization of human proto-oncogenes. *Am. J. Hum. Genet.* 34: 175.
2. Hibbs, M.L., et al. 1997. Lyn, a Src-like tyrosine kinase. *Int. J. Biochem. Cell Biol.* 29: 397-400.

## CHROMOSOMAL LOCATION

Genetic locus: FYN (human) mapping to 6q21; Fyn (mouse) mapping to 10 B1.

## SOURCE

Fyn (FYN-59) is a mouse monoclonal antibody raised against partial recombinant Fyn corresponding to amino acids 7-176 of human origin.

## PRODUCT

Each vial contains 50 µg IgG in 500 µl of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Fyn (FYN-59) is recommended for detection of Fyn 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) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Fyn siRNA (h): sc-29321, Fyn siRNA (m): sc-35425, Fyn shRNA Plasmid (h): sc-29321-SH, Fyn shRNA Plasmid (m): sc-35425-SH, Fyn shRNA (h) Lentiviral Particles: sc-29321-V and Fyn shRNA (m) Lentiviral Particles: sc-35425-V.

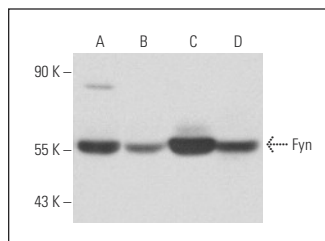
Molecular Weight of Fyn: 59 kDa.

Positive Controls: Fyn (h): 293T Lysate: sc-115186, HuT 78 whole cell lysate: sc-2208 or HeLa whole cell lysate: sc-2200.

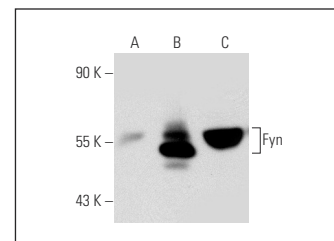
## STORAGE

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

## DATA



Fyn (FYN-59): sc-73388. Western blot analysis of Fyn expression in HuT 78 (A), Jurkat (B), HeLa (C) and M1 (D) whole cell lysates.



Fyn (FYN-59): sc-73388. Western blot analysis of Fyn expression in non-transfected 293T: sc-117752 (A), human Fyn transfected 293T: sc-115186 (B) and HeLa (C) whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Kortum, R.L., et al. 2013. A phospholipase C-γ1-independent, RasGRP1-ERK-dependent pathway drives lymphoproliferative disease in linker for activation of T cells-Y136F mutant mice. *J. Immunol.* 190: 147-158.
2. Han, J., et al. 2013. A critical role for Lyn kinase in strengthening endothelial integrity and barrier function. *Blood* 122: 4140-4149.
3. Suvanto, M., et al. 2015. Podocyte proteins in congenital and minimal change nephrotic syndrome. *Clin. Exp. Nephrol.* 19: 481-488.
4. Fenton, S.E., et al. 2015. Targeting Fyn in Ras-transformed cells induces Factin to promote adherens junction-mediated cell-cell adhesion. *Mol. Carcinog.* 54: 1181-1193.

## 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.



See **Fyn (15): sc-434** for Fyn antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.