SANTA CRUZ BIOTECHNOLOGY, INC.

c-Yes (B-11): sc-515336

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 control 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. Human c-Yes is the cellular homolog of the Yamaguchi sarcoma virus oncogene, Yes1. The human c-Yes gene maps to chromosome 18p11.32 and encodes a 543 amino acid protein. c-Src and c-Yes kinases are more than 80% homologous outside of unique amino-termini. Their respective SH3 and SH2 domains are capable of directing specificity in substrate binding.

REFERENCES

1. Sakaguchi, A.Y., et al. 1982. Organization of human proto-oncogenes. Am. J. Hum. Genet. 34: 175.
2. Semba, K., et al. 1985. Location of the c-Yes gene on the human chromosome and its expression in various tissues. Science 227: 1038-1040.
3. Williams, J.C., et al. 1998. Insights into Src kinase functions: structural comparisons. Trends Biochem. Sci. 23: 179-184.
4. Tatosyan, A.G., et al. 2000. Kinases of the Src family: structure and functions. Biochemistry 65: 49-58.
5. Summy, J.M., et al. 2000. The SH3 and SH2 domains are capable of directing specificity in protein interactions between the non-receptor tyrosine kinases cSrc and cYes. Oncogene 19: 155-160.
6. Bjorge, J.D., et al. 2000. Selected glimpses into the activation and function of Src kinase. Oncogene 19: 5620-5635.
7. Korade-Mirnics, Z., et al. 2000. Src kinase-mediated signaling in leukocytes. J. Leukoc. Biol. 68: 603-613.
8. Gilmore, E.S., et al. 2001. SRC family kinases mediate epithelial Na^+ channel inhibition by endothelin. J. Biol. Chem. 276: 42610-42617.

CHROMOSOMAL LOCATION

Genetic locus: YES1 (human) mapping to 18p11.32.

SOURCE

c-Yes (B-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 19-43 near the N-terminus of c-Yes of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-376622 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

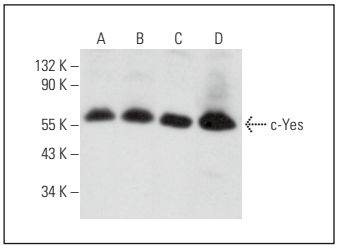
c-Yes (B-11) is recommended for detection of c-Yes of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for c-Yes siRNA (h): sc-29860, c-Yes shRNA Plasmid (h): sc-29860-SH and c-Yes shRNA (h) Lentiviral Particles: sc-29860-V.

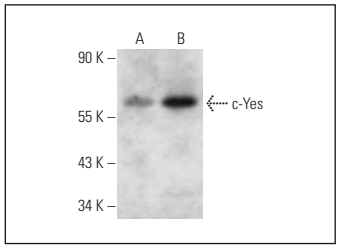
Molecular Weight of c-Yes: 62 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, Caco-2 cell lysate: sc-2262 or JAR cell lysate: sc-2276.

DATA



c-Yes (B-11): sc-515336. Western blot analysis of c-Yes expression in T98G (**A**), A-431 (**B**), JAR (**C**) and Caco-2 (**D**) whole cell lysates.



c-Yes (B-11): sc-515336. Western blot analysis of c-Yes expression in Jurkat (**A**) and C32 (**B**) whole cell lysates.

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.