SANTA CRUZ BIOTECHNOLOGY, INC.

p-c-Yes (Tyr 537): sc-130182

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. Human c-Yes is subject to auto-phosphorylation at Tyr 537.

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.

CHROMOSOMAL LOCATION

Genetic locus: YES1 (human) mapping to 18p11.32; Yes1 (mouse) mapping to 5 B1.

SOURCE

p-c-Yes (Tyr 537) is a rabbit polyclonal antibody raised against a short amino acid sequence containing Tyr 537 phosphorylated c-Yes of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml 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.

RESEARCH USE

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

PROTOCOLS

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

APPLICATIONS

p-c-Yes (Tyr 537) is recommended for detection of Tyr 537 phosphorylated c-Yes of human origin, correspondingly phosphorylated Tyr 535 of mouse origin and correspondingly phosphorylated Tyr 536 of rat 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 c-Yes siRNA (h): sc-29860, c-Yes siRNA (m): sc-29861, c-Yes shRNA Plasmid (h): sc-29860-SH, c-Yes shRNA Plasmid (m): sc-29861-SH, c-Yes shRNA (h) Lentiviral Particles: sc-29860-V and c-Yes shRNA (m) Lentiviral Particles: sc-29861-V.

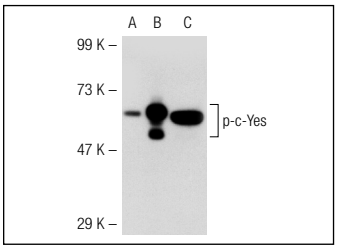
Molecular Weight of p-c-Yes: 62 kDa.

Positive Controls: c-Yes (m): 293T Lysate: sc-118893 or NIH/3T3 whole cell lysate: sc-2210.

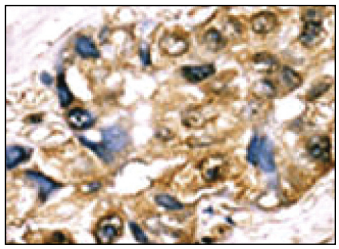
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



p-c-Yes (Tyr 527): sc-130182. Western blot analysis of c-Yes phosphorylation in non-transfected 293T: sc-117752 (**A**), mouse c-Yes transfected 293T: sc-118893 (**B**) and NIH/3T3 (**C**) whole cell lysates.



p-c-Yes (Tyr 527): sc-130182. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cancer tissue showing cytoplasmic staining.

SELECT PRODUCT CITATIONS

1. Barabutis, N., et al. 2013. LPS induces pp60c-src-mediated tyrosine phosphorylation of Hsp90 in lung vascular endothelial cells and mouse lung. Am. J. Physiol. Lung Cell. Mol. Physiol. 304: L883-L893.