

c-Yes (F-7): sc-8403



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.

CHROMOSOMAL LOCATION

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

SOURCE

c-Yes (F-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1-28 at the N-terminus of c-Yes of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

c-Yes (F-7) is available conjugated to agarose (sc-8403 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-8403 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-8403 PE), fluorescein (sc-8403 FITC), Alexa Fluor® 488 (sc-8403 AF488), Alexa Fluor® 546 (sc-8403 AF546), Alexa Fluor® 594 (sc-8403 AF594) or Alexa Fluor® 647 (sc-8403 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-8403 AF680) or Alexa Fluor® 790 (sc-8403 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, c-Yes (F-7) is available conjugated to TRITC (sc-8403 TRITC), 200 µg/ml, for IF, IHC(P) and FCM.

Blocking peptide available for competition studies, sc-8403 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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RESEARCH USE

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

APPLICATIONS

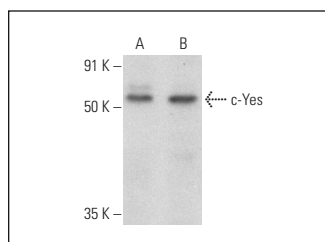
c-Yes (F-7) is recommended for detection of c-Yes p62 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 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 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.

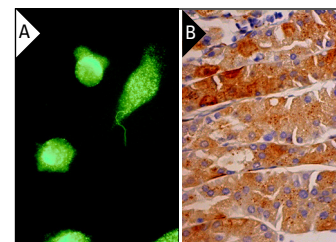
Molecular Weight of c-Yes: 62 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214, Jurkat whole cell lysate: sc-2204 or NIH/3T3 whole cell lysate: sc-2210.

DATA



c-Yes (F-7): sc-8403. Western blot analysis of c-Yes expression in NIH/3T3 (A) and KNRK (B) whole cell lysates.



c-Yes (F-7): sc-8403. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing localized staining within the cell (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human upper stomach tissue showing cytoplasmic staining of glandular cells (B).

SELECT PRODUCT CITATIONS

1. Parravicini, V., et al. 2002. Fyn kinase initiates complementary signals required for IgE-dependent mast cell degranulation. *Nat. Immunol.* 3: 741-748.
2. Xiao, X., et al. 2013. c-Yes regulates cell adhesion at the apical ectoplasmic specialization-blood-testis barrier axis via its effects on protein recruitment and distribution. *Am. J. Physiol. Endocrinol. Metab.* 304: E145-E159.
3. Cravo, A.S., et al. 2015. Hippo pathway elements co-localize with Occludin: a possible sensor system in pancreatic epithelial cells. *Tissue Barriers* 3: e1037948.
4. Janjanam, J. and Rao, G.N. 2016. Novel role of cortactin in G protein-coupled receptor agonist-induced nuclear export and degradation of p21^{Cip1}. *Sci. Rep.* 6: 28687.

STORAGE

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