

c-Src (17AT28): sc-130124

BACKGROUND

The major translational products of the Src gene family are membrane-associated tyrosine protein kinases that lack transmembrane and external amino acid sequences. By virtue of their common structural motifs, the Src family is composed of nine members in vertebrates, including c-Src, c-Yes, c-Fgr, Yrk, Fyn, Lyn, Hck, Lck and Blk. Src family kinases, which contain an amino-terminal cell membrane anchor followed by SH3 and SH2 domains, transduce signals that are involved in the control of a variety of cellular processes, including proliferation, differentiation, motility and adhesion. Src family members are normally maintained in an inactive state and can be activated transiently during cellular events such as mitosis. Different subcellular locations of Src family kinases may be important for the regulation of specific cellular processes, such as mitogenesis, cytoskeletal organization and membrane trafficking. c-Src (also designated pp60Src, Src p60 and proto-oncogene tyrosine protein kinase Src) is expressed in a broad range of tissue and cell types, although the highest levels of c-Src are detected in neuronal tissues and platelets. c-Src may play a role in events associated with both neuronal differentiation and maintenance of mature neuronal cell functions.

CHROMOSOMAL LOCATION

Genetic locus: SRC (human) mapping to 20q11.23; Src (mouse) mapping to 2 H1.

SOURCE

c-Src (17AT28) is a mouse monoclonal antibody raised against full-length recombinant c-Src of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

c-Src (17AT28) is recommended for detection of c-Src 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-Src siRNA (h): sc-29228, c-Src siRNA (m): sc-29859, c-Src siRNA (r): sc-270199, c-Src shRNA Plasmid (h): sc-29228-SH, c-Src shRNA Plasmid (m): sc-29859-SH, c-Src shRNA Plasmid (r): sc-270199-SH, c-Src shRNA (h) Lentiviral Particles: sc-29228-V, c-Src shRNA (m) Lentiviral Particles: sc-29859-V and c-Src shRNA (r) Lentiviral Particles: sc-270199-V.

Molecular Weight of c-Src: 60 kDa.

Positive Controls: c-Src (h): 293T Lysate: sc-176936, WEHI-231 whole cell lysate: sc-2213 or Jurkat whole cell lysate: sc-2204.

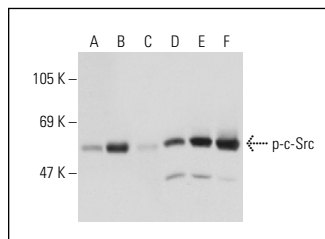
RESEARCH USE

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

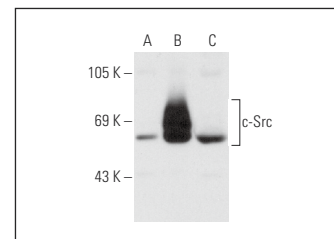
STORAGE

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

DATA



Western blot analysis of c-Src phosphorylation in untreated (A, D), serum starved and EGF treated (B, E) and serum starved, EGF and lambda protein phosphatase treated (C, F) HEK293 whole cell lysates. Antibodies tested include p-c-Src (H-3): sc-166860 (A, B, C) and c-Src (17AT28): sc-130124 (D, E, F).



c-Src (17AT28): sc-130124. Western blot analysis of c-Src expression in non-transfected 293T: sc-117752 (A), human c-Src transfected 293T: sc-176936 (B) and WEHI-231 (C) whole cell lysates.

SELECT PRODUCT CITATIONS

- Koch, P., et al. 2009. PTIP51 mRNA and protein expression in tissue microarrays and promoter methylation of benign prostate hyperplasia and prostate carcinoma. *Prostate* 69: 1751-1762.
- Diao, Y., et al. 2016. Dasatinib promotes paclitaxel-induced necroptosis in lung adenocarcinoma with phosphorylated caspase-8 by c-Src. *Cancer Lett.* 379: 12-23.
- Tan, W., et al. 2017. Ergosterol peroxide inhibits ovarian cancer cell growth through multiple pathways. *Onco Targets Ther.* 10: 3467-3474.
- Lee, J.H., et al. 2018. Tescalcin/c-Src/IGF1R β -mediated STAT3 activation enhances cancer stemness and radioresistant properties through ALDH1. *Sci. Rep.* 8: 10711.
- Salinas-Vera, Y.M., et al. 2019. HypoxamiRs profiling identify miR-745 as a regulator of the early stages of vasculogenic mimicry in SKOV3 ovarian cancer cells. *Front. Oncol.* 9: 381.
- Luo, J., et al. 2020. ClpP regulates breast cancer cell proliferation, invasion and apoptosis by modulating the Src/PI3K/Akt signaling pathway. *PeerJ* 8: e8754.
- Ramirez-Ricardo, J., et al. 2021. Role of Src/FAK in migration and invasion mediated by extracellular vesicles from MDA-MB-231 cells stimulated with linoleic acid. *Med. Oncol.* 38: 40.
- Palma-Baqueros, V., et al. 2022. Src-related thrombocytopenia: a fine line between a megakaryocyte dysfunction and an immune-mediated disease. *Blood Adv.* 6: 5244-5255.



See **c-Src (B-12): sc-8056** for c-Src antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.