

p-c-Src (Tyr 530): sc-101803

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, 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

p-c-Src (Tyr 530) is a rabbit polyclonal antibody raised against a short amino acid sequence containing Tyr 530 phosphorylated c-Src of human origin.

PRODUCT

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

RESEARCH USE

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

APPLICATIONS

p-c-Src (Tyr 530) is recommended for detection of Tyr 530 phosphorylated c-Src of human and rat origin, and Tyr 535 phosphorylated c-Src of mouse 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); also recommended for detection of correspondingly phosphorylated Fyn and c-Yes.

Suitable for use as control antibody for c-Src siRNA (h): sc-29228, c-Src siRNA (m): sc-29859, c-Src shRNA Plasmid (h): sc-29228-SH, c-Src shRNA Plasmid (m): sc-29859-SH, c-Src shRNA (h) Lentiviral Particles: sc-29228-V and c-Src shRNA (m) Lentiviral Particles: sc-29859-V.

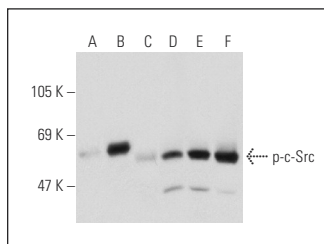
Molecular Weight of p-c-Src: 60 kDa.

Positive Controls: NIH/3T3 + PMA cell lysate: sc-24748, HEK293 whole cell lysate: sc-45136 or A-431 + EGF whole cell lysate: sc-2202.

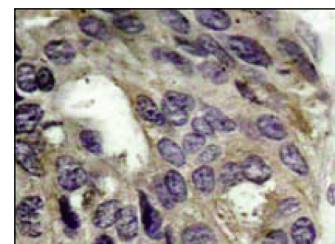
RECOMMENDED SECONDARY REAGENTS

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 B Blocking Reagent: sc-2333, Western Blotting Luminol Reagent: sc-2048 and Lambda Phosphatase: sc-200312A. 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



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 (Tyr 530): sc-101803 (A,B,C) and c-Src (17AT28): sc-130124 (D,E,F).



p-c-Src (Tyr 530): sc-101803. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast carcinoma tissue showing cytoplasmic staining.

SELECT PRODUCT CITATIONS

- Lo Buono, N., et al. 2011. The CD157-integrin partnership controls transendothelial migration and adhesion of human monocytes. *J. Biol. Chem.* 286: 18681-18691.
- Herraiz, C., et al. 2011. Signaling from the human melanocortin 1 receptor to ERK1 and ERK2 mitogen-activated protein kinases involves transactivation of cKIT. *Mol. Endocrinol.* 25: 138-156.
- Morone, S., et al. 2014. Binding of CD157 protein to fibronectin regulates cell adhesion and spreading. *J. Biol. Chem.* 289: 15588-15601.

STORAGE

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



Try **p-c-Src (H-3): sc-166860** or **p-c-Src (H-8): sc-166859**, our highly recommended monoclonal alternatives to p-c-Src (Tyr 530).