

# p-c-Src (Tyr 216): sc-16844

## BACKGROUND

The major translational products of the members of the Src gene family identified to date are membrane-associated tyrosine protein kinases that lack transmembrane and external amino acid sequences, thereby distinguishing this group from the receptor class of tyrosine kinases. Members of this group include c-Src, c-Yes, Fyn, Lck, Lyn, Blk and c-Fgr. The major Src gene encoded protein, pp60Src, is expressed in a broad range of tissue and cell types, although the highest levels of pp60Src are detected in neuronal tissues and platelets. pp60Src may play a role in events associated with both neuronal differentiation and maintenance of mature neuronal cell functions.

## REFERENCES

1. Brugge, J.S., Cotton, P.C., Queral, A.E., Barret, J.N., Nonner, D. and Keane, R.W. 1985. Neurons express high levels of structurally modified, activated form of pp60Src. *Nature* 316: 554-557.
2. Golden, A., Nemeth, S.P. and Brugge, J.S. 1986. Blood platelets express high levels of the pp60Src-specific tyrosine kinase activity. *Proc. Natl. Acad. Sci. USA* 83: 852-856.
3. Cartwright, C.A., Simantov, R., Kaplan, P.L., Hunter, T. and Eckhart, W. 1987. Alterations in pp60Src accompany differentiation of neurons from rat embryo striatum. *Mol. Cell Biol.* 7: 1830-1840.
4. Wiestler, O.D. and Walter, G. 1988. Developmental expression of two forms of pp60Src in mouse brain. *Mol. Cell. Biol.* 8: 502-504.
5. Eiseman, E. and Bolen, J.B. 1990. Src-related tyrosine protein kinases as signaling components in hematopoietic cells. *Cancer Cells* 2: 303-310.
6. Bolen, J.B., Thompson, P.A., Eiseman, E. and Horak, I.D. 1991. Expression and interactions of the Src family of tyrosine protein kinases in T lymphocytes. *Adv. Cancer Res.* 57: 103-149.
7. Broome, M.A. and Hunter, T. 1997. The PDGF receptor phosphorylates Tyr 138 in the c-Src domain *in vivo* reducing peptide ligand binding. *Oncogene* 14: 17-34.

## CHROMOSOMAL LOCATION

Genetic locus: SRC (human) mapping to 20q12-q13; Src (mouse) mapping to 2 H1.

## SOURCE

p-c-Src (Tyr 216) is available as either goat (sc-16844) or rabbit (sc-16844-R) polyclonal affinity purified antibody raised against a short amino acid sequence containing phosphorylated Tyr 216 of c-Src of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-16844 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

p-c-Src (Tyr 216) is recommended for detection of Tyr 216 phosphorylated c-Src of human and rat origin, and Tyr 221 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 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 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: COLO 201 + serum starvation or NIH/3T3 + PDGF cell lysate: sc-3803.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: for goat primary antibody (sc-14268): use donkey anti-goat IgG-HRP: sc-2020 (range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (range: 1:2000-1:5000), for rabbit primary antibody (sc-14268-R): use goat anti-rabbit IgG-HRP: sc-2004 (range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (range: 1:2000-1:5000); Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent) 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: for goat primary antibody (sc-14268): use donkey anti-goat IgG-FITC: sc-2024 (range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (range: 1:100-1:400), for rabbit primary antibody (sc-14268-R): use goat anti-rabbit IgG-FITC: sc-2012 (range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## SELECT PRODUCT CITATIONS

1. Chung, C.H., et al. 2009. The integrin  $\alpha 2\beta 1$  agonist, aggrexin, promotes proliferation and migration of VSMC through NF $\kappa$ B translocation and PDGF production. *Br. J. Pharmacol.* 156: 846-856.

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.