

c-Fos (4): sc-52



The Power to Question

BACKGROUND

The c-Fos oncogene was initially detected in two independent murine osteosarcoma virus isolate and an avian nephroblastoma virus. The cellular homolog, c-Fos, encodes a nuclear phosphoprotein that is rapidly and transiently induced by a variety of agents and functions as a transcriptional regulator for several genes. In contrast to c-Jun proteins which form homo- and heterodimers which bind to specific DNA response elements, c-Fos proteins are only active as heterodimers with members of the Jun gene family. Functional homologs of c-Fos include Fra-1, Fra-2 and Fos B genes. In addition, selected ATF/CREB family members can form leucine zipper dimers with Fos and Jun. Different dimers exhibit differential specificity and affinity for AP-1 and CRE sites.

CHROMOSOMAL LOCATION

Genetic locus: FOS (human) mapping to 14q24.3; Fos (mouse) mapping to 12 D2.

SOURCE

c-Fos (4) is available as either rabbit (sc-52) or goat (sc-52-G) polyclonal affinity purified antibody raised against a peptide mapping at the N-terminus of c-Fos 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-52 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-52 X, 200 µg/0.1 ml; as phycoerythrin conjugate for flow cytometry, sc-52 PE, 100 tests; as HRP conjugate for Western blotting, sc-52 HRP, 200 µg/ml; as fluorescein (sc-52 FITC) or rhodamine (sc-52 TRITC) conjugates for use in immunofluorescence, 200 µg/ml; as Alexa Fluor® 405 (sc-52 AF405), Alexa Fluor® 488 (sc-52 AF488) or Alexa Fluor® 647 (sc-52 AF647) conjugates for flow cytometry or immunofluorescence; 100 µg/2 ml.

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APPLICATIONS

c-Fos (4) is recommended for detection of c-Fos 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 and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 µg per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

c-Fos (4) is also recommended for detection of c-Fos in additional species, including equine and feline.

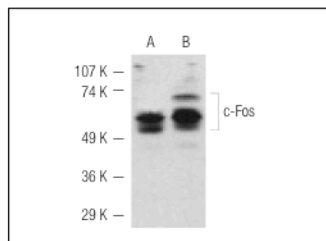
Suitable for use as control antibody for c-Fos siRNA (h): sc-29221, c-Fos siRNA (m): sc-29222, c-Fos shRNA Plasmid (h): sc-29221-SH, c-Fos shRNA Plasmid (m): sc-29222-SH, c-Fos shRNA (h) Lentiviral Particles: sc-29221-V and c-Fos shRNA (m) Lentiviral Particles: sc-29222-V.

c-Fos (4) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

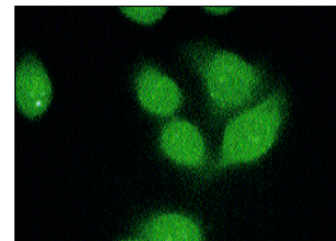
STORAGE

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

DATA



c-Fos (4)-G: sc-52-G. Western blot analysis of c-Fos expression in untreated (A) and phorbol ester-treated (B) nuclear cell extracts.



c-Fos (4): sc-52. Nuclear immunofluorescence staining of methanol-fixed, phorbol ester-induced HeLa cells.

SELECT PRODUCT CITATIONS

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- Cloutier, A., et al. 2003. Inflammatory cytokine expression is independent of the c-Jun N-terminal kinase/AP-1 signaling cascade in human neutrophils. *J. Immunol.* 171: 3751-3761.
- Chen, C.W., et al. 2003. Signal transduction for inhibition of inducible nitric oxide synthase and cyclooxygenase-2 induction by capsaicin and related analogs in macrophages. *Br. J. Pharmacol.* 140: 1077-1087.
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- Dillon, S., et al. 2004. A Toll-like receptor 2 ligand stimulates Th2 responses *in vivo*, via induction of extracellular signal-regulated kinase mitogen-activated protein kinase and c-Fos in dendritic cells. *J. Immunol.* 172: 4733-4743.
- Radwanska, K., et al. 2010. Central noradrenergic lesion induced by DSP-4 impairs the acquisition of avoidance reactions and prevents molecular changes in the amygdala. *Neurobiol. Learn. Mem.* 94: 303-311.
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- Shao, C., et al. 2010. Regulation of CCAAT/enhancer-binding protein homologous protein (CHOP) expression by interleukin-1 β in pancreatic β cells. *J. Biol. Chem.* 285: 19710-19719.

RESEARCH USE

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