

# c-Fos (4): sc-52

## 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 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-52 X, 200 µg/0.1 ml.

c-Fos (4) is available conjugated to HRP (sc-52 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; and to either phycoerythrin (sc-52 PE, 200 µg/ml), fluorescein (sc-52 FITC, 200 µg/ml), Alexa Fluor® 488 (sc-52 AF488, 200 µg/ml) or Alexa Fluor® 647 (sc-52 AF647, 200 µg/ml), for IF, IHC(P) and FCM.

In addition, c-Fos (4) is available conjugated to either TRITC (sc-52 TRITC, 200 µg/ml) or Alexa Fluor® 405 (sc-52 AF405), 100 µg/2 ml, for IF, IHC(P) and FCM.

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% stabilizer protein).

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

## STORAGE

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

## RESEARCH USE

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

## PROTOCOLS

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

## 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 (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), flow cytometry (1 µg per 1 x 10<sup>6</sup> 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.

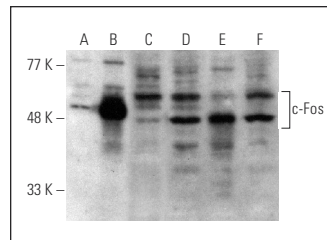
Suitable for use as control antibody for c-Fos siRNA (h): sc-29221, c-Fos siRNA (m): sc-29222, c-Fos shRNA Plasmid (h): sc-29221-SH, c-Fos shRNA Plasmid (m): sc-29222-SH, c-Fos shRNA (h) Lentiviral Particles: sc-29221-V and c-Fos shRNA (m) Lentiviral Particles: sc-29222-V.

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

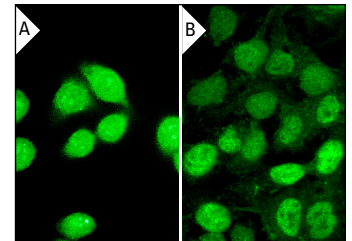
Molecular Weight of c-Fos: 62 kDa.

Positive Controls: c-Fos (m): 293T Lysate: sc-118888.

## DATA



c-Fos (4) HRP: sc-52 HRP. Direct western blot analysis of c-Fos expression in non-transfected 293T: sc-117752 (A), mouse c-Fos transfected 293T: sc-118888 (B), Y79 (C) and MIA PaCa-2 (D) whole cell



c-Fos (4): sc-52. Nuclear immunofluorescence staining of methanol-fixed, phorbol ester-induced HeLa cells (A) and formalin-fixed Hep G2 cells showing nuclear localization (B).

## SELECT PRODUCT CITATIONS

- Bohlen, N. and Hertl, M. 1975. Adverse effects of anti-epileptic drug. Dtsch. Med. Wochenschr. 100: 1904-1906.
- Yan, X., et al. 2015. Coenzyme Q10 consumption promotes ABCG1-mediated macrophage cholesterol efflux: a randomized, double-blind, placebo-controlled, cross-over study in healthy volunteers. Mol. Nutr. Food Res. 59: 1725-1734.
- Venza, M., et al. 2015. The overriding of TRAIL resistance by the histone deacetylase inhibitor MS-275 involves c-myc up-regulation in cutaneous, uveal, and mucosal melanoma. Int. Immunopharmacol. 28: 313-321.



Try **c-Fos (E-8): sc-166940** or **c-Fos (C-10): sc-271243**, our highly recommended monoclonal alternatives to c-Fos (4). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **c-Fos (E-8): sc-166940**.