

Fra-1 (R-20): sc-605

BACKGROUND

The v-Fos oncogene was initially detected in two independent murine osteosarcoma virus isolates and an avian nephroblastoma virus. Members of the c-Fos gene family, including c-Fos, Fos B, Fra-1 and Fra-2, encode nuclear phosphoproteins that are rapidly and transiently induced by a variety of agents and function as transcriptional regulators 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. 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: FOSL1 (human) mapping to 11q13.1; Fos1 (mouse) mapping to 19 A.

SOURCE

Fra-1 (R-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of Fra-1 of rat 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-605 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-605 X, 200 µg/0.1 ml.

APPLICATIONS

Fra-1 (R-20) is recommended for detection of Fra-1 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Fra-1 siRNA (h): sc-35405, Fra-1 siRNA (m): sc-35406, Fra-1 shRNA Plasmid (h): sc-35405-SH, Fra-1 shRNA Plasmid (m): sc-35406-SH, Fra-1 shRNA (h) Lentiviral Particles: sc-35405-V and Fra-1 shRNA (m) Lentiviral Particles: sc-35406-V.

Fra-1 (R-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Fra-1: 40 kDa.

Positive Controls: Fra-1 (h): 293 Lysate: sc-113305, 3611-RF whole cell lysate: sc-2215 or NIH/3T3 nuclear extract: sc-2138.

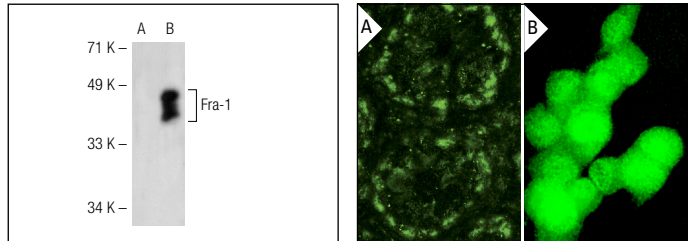
STORAGE

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.

DATA



Fra-1 (R-20): sc-605. Western blot analysis of Fra-1 expression in non-transfected: sc-117752 (A) and human Fra-1 transfected: sc-113305 (B) 293T whole cell lysates.

Fra-1 (R-20): sc-605. Immunofluorescence staining of normal mouse intestine frozen section (A) and methanol-fixed NIH/3T3 cells (B) showing nuclear staining.

SELECT PRODUCT CITATIONS

- Battista, S., et al. 1998. Increase in AP-1 activity is a general event in thyroid cell transformation *in vitro* and *in vivo*. *Oncogene* 17: 377-385.
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- Salameh A, et al. 2010. Growth factor stimulation induces cell survival by c-Jun. ATF2-dependent activation of Bcl-x_L. *J. Biol. Chem.* 285: 23096-23104.
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- Baan, B., et al. 2010. *In situ* proximity ligation detection of c-Jun/AP-1 dimers reveals increased levels of c-Jun/Fra1 complexes in aggressive breast cancer cell lines *in vitro* and *in vivo*. *Mol. Cell. Proteomics* 9: 1982-1990.
- Landreville, S., et al. 2011. Suppression of $\alpha 5$ gene expression is closely related to the tumorigenic properties of uveal melanoma cell lines. *Pigment Cell Melanoma Res.* 24: 643-655.
- Stinson, S., et al. 2011. TRPS1 targeting by miR-221/222 promotes the epithelial-to-mesenchymal transition in breast cancer. *Sci. Signal.* 4: ra41.
- Evellin, S., et al. 2013. FOSL1 controls the assembly of endothelial cells into capillary tubes by direct repression of αv and $\beta 3$ integrin transcription. *Mol. Cell. Biol.* 33: 1198-1209.



Try **Fra-1 (D-3): sc-376148** or **Fra-1 (C-12): sc-28310**, our highly recommended monoclonal alternatives to Fra-1 (R-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Fra-1 (D-3): sc-376148**.