

Fra-1 (H-50): sc-22794

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 hetero-dimers 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.

REFERENCES

1. Finkel, M.P., et al. 1966. Virus induction of osteosarcomas in mice. *Science* 151: 698-701.
2. Sambucetti, L.C., et al. 1986. The Fos protein complex is associated with DNA in isolated nuclei and binds to DNA cellulose. *Science* 234: 1417-1419.

CHROMOSOMAL LOCATION

Genetic locus: FOSL1 (human) mapping to 11q13.1; Fosl1 (mouse) mapping to 19 A.

SOURCE

Fra-1 (H-50) is rabbit polyclonal antibody raised against amino acids 1-50 of Fra-1 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.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-22794 X, 200 µg/0.1 ml.

APPLICATIONS

Fra-1 (H-50) is recommended for detection of Fra-1 of human and, to a lesser extent, mouse and rat 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 (H-50) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

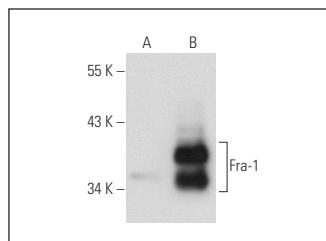
Molecular Weight of Fra-1: 40 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or Fra-1 (h7): 293T Lysate: sc-113305.

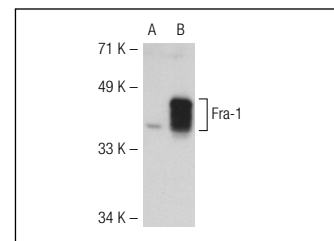
STORAGE

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

DATA



Fra-1 (H-50): sc-22794. Western blot analysis of Fra-1 expression in non-transfected: sc-117752 (A) and human Fra-1 transfected: sc-176608 (B) 293T whole cell lysates.



Fra-1 (H-50): sc-22794. 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.

SELECT PRODUCT CITATIONS

1. Nakayama, T., et al. 2007. Aberrant expression of Fra-2 promotes CCR4 expression and cell proliferation in adult T-cell leukemia. *Oncogene* 27: 3221-3232.
2. Nikolova, D.A., et al. 2009. Cetuximab attenuates metastasis and u-PAR expression in non-small cell lung cancer: u-PAR and E-cadherin are novel biomarkers of cetuximab sensitivity. *Cancer Res.* 69: 2461-2470.
3. 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.
4. Zhang, L., et al. 2010. Fos-related activator-1 is overexpressed in oral squamous cell carcinoma and associated with tumor lymph node metastasis. *J. Oral Pathol. Med.* 39: 470-476.
5. Zhang, L., et al. 2011. Yes-associated protein promotes cell proliferation by activating Fos Related Activator-1 in oral squamous cell carcinoma. *Oral Oncol.* 47: 693-697.
6. Wang, W.M., et al. 2011. Binding site specificity and factor redundancy in activator protein-1-driven human papillomavirus chromatin-dependent transcription. *J. Biol. Chem.* 286: 40974-40986.
7. Sundqvist, A., et al. 2013. Specific interactions between Smad proteins and AP-1 components determine TGFβ-induced breast cancer cell invasion. *Oncogene* 32: 3606-3615.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.