SANTA CRUZ BIOTECHNOLOGY, INC.

Fra-1 (N-15): sc-69273



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.

REFERENCES

- 1. Finkel, M.P., et al. 1966. Virus induction of osteo-sarcomas in mice. Science 151: 698-701.
- Sambucetti, L.C. and Curran, T. 1986. The Fos protein complex is associated with DNA in isolated nuclei and binds to DNA cellulose. Science 234: 1417-1419.
- Nishizawa, M., et al. 1987. An avian transforming retrovirus isolated from a nephroblastoma that carries the Fos gene as the oncogene. J. Virol. 61: 3733-3740.
- 4. Bohmann, D., et al. 1987. Human proto-oncogene c-Jun encodes a DNA binding protein with structural and functional properties of transcription factor AP-1. Science 238: 1386-1392.
- Cohen, D.R., et al. 1989. The product of a Fos-related gene, Fra-1, binds cooperatively to the AP-1 site with Jun: transcription factor AP-1 is comprised of multiple protein complexes. Genes Dev. 3: 173-184.
- Nishina, H., et al. 1990. Isolation and characterization of Fra-2, an additional member of the Fos gene family. Proc. Natl. Acad. Sci. USA 87: 3619-3623.

CHROMOSOMAL LOCATION

Genetic locus: FOSL1 (human) mapping to 11q13.1.

SOURCE

Fra-1 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Fra-1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-69273 P, (100 μ g 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-69273 X, 200 $\mu g/0.1$ ml.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Fra-1 (N-15) is recommended for detection of Fra-1 of human and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 shRNA Plasmid (h): sc-35405-SH and Fra-1 shRNA (h) Lentiviral Particles: sc-35405-V.

Fra-1 (N-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Fra-1: 40 kDa.

Positive Controls: Fra-1 (h): 293T lysate: sc-176608, T-47D cell lysate: sc-2293 or HeLa nuclear extract: sc-2120.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA





Fra-1 (N-15): sc-69273. 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 (N-15): sc-69273. Western blot analysis of Fra-1 expression in T-47D whole cell lysate.

RESEARCH USE

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

MONOS Satisfation Guaranteed

Try Fra-1 (D-3): sc-376148 or Fra-1 (C-12): sc-28310, our highly recommended monoclonal aternatives to Fra-1 (N-15). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see Fra-1 (D-3): sc-376148.