

Fra-1 (C-12): sc-28310

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 that 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 (C-12) is a mouse monoclonal antibody raised against amino acids 1-50 of Fra-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain 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-28310 X, 200 µg/0.1 ml.

Fra-1 (C-12) is available conjugated to agarose (sc-28310 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-28310 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-28310 PE), fluorescein (sc-28310 FITC), Alexa Fluor® 488 (sc-28310 AF488), Alexa Fluor® 546 (sc-28310 AF546), Alexa Fluor® 594 (sc-28310 AF594) or Alexa Fluor® 647 (sc-28310 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-28310 AF680) or Alexa Fluor® 790 (sc-28310 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Fra-1 (C-12) is recommended for detection of Fra-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1,000), 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) 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 (C-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

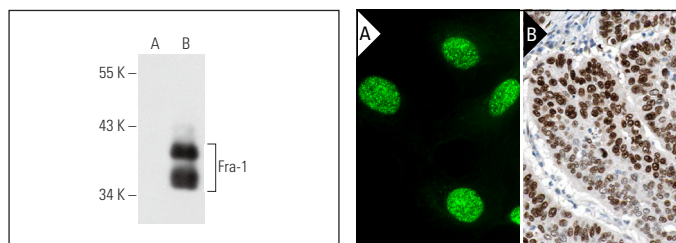
Molecular Weight of Fra-1: 40 kDa.

Positive Controls: Fra-1 (h): 293T Lysate: sc-176608, U-937 cell lysate: sc-2239 or HeLa nuclear extract: sc-2120.

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 (C-12): sc-28310. 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 (C-12): sc-28310. Immunofluorescence staining of formalin-fixed HepG2 cells showing nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human cervical cancer showing nuclear staining of tumor cells magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program (B).

SELECT PRODUCT CITATIONS

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- Song, Y., et al. 2008. Fra-1 and Stat3 synergistically regulate activation of human MMP-9 gene. *Mol. Immunol.* 45: 137-143.
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- Logullo, A.F., et al. 2011. Role of Fos-related antigen 1 in the progression and prognosis of ductal breast carcinoma. *Histopathology* 58: 617-625.
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- Hasenfuss, S.C., et al. 2014. Activator protein 1 transcription factor Fos-related antigen 1 (Fra-1) is dispensable for murine liver fibrosis, but modulates xenobiotic metabolism. *Hepatology* 59: 261-273.
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RESEARCH USE

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

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