

Fra-2 (H-103): sc-13017

BACKGROUND

The Fos-related gene Fra-2 was initially molecularly cloned from chicken genomic DNA and shown to represent a new member of the immediate early gene family. The human counterpart of the chicken Fra-2 gene has been described. Sequence alignment shows that the amino acid sequences conserved among Fra-2, c-Fos, Fra-1 and Fos B are contained in five regions. Region 2, the longest and most highly conserved region, contains the leucine zipper structure and the basic region, suggesting that like Fos, Fra-1 and Fos B, Fra-2 also forms heterodimers with c-Jun that recognize specific DNA sequences, such as the binding site for transcription factor AP-1. Such a model is further supported by the finding that the Fra-2 gene product forms a complex with c-Jun in growth-stimulated cells.

CHROMOSOMAL LOCATION

Genetic locus: FOSL2 (human) mapping to 2p23.2; Fosl2 (mouse) mapping to 5 B1.

SOURCE

Fra-2 (H-103) is a rabbit polyclonal antibody raised against amino acids 180-282 of Fra-2 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-13017 X, 200 µg/0.1 ml.

APPLICATIONS

Fra-2 (H-103) is recommended for detection of Fra-2 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Fra-2 (H-103) is also recommended for detection of Fra-2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Fra-2 siRNA (h): sc-35407, Fra-2 siRNA (m): sc-35408, Fra-2 shRNA Plasmid (h): sc-35407-SH, Fra-2 shRNA Plasmid (m): sc-35408-SH, Fra-2 shRNA (h) Lentiviral Particles: sc-35407-V and Fra-2 shRNA (m) Lentiviral Particles: sc-35408-V.

Fra-2 (H-103) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Fra-2: 40 kDa.

Positive Controls: Fra-2 (h): 293T Lysate: sc-176435, MCF7 whole cell lysate: sc-2206 or NIH/3T3 nuclear extract: sc-2138.

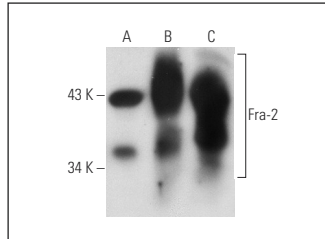
STORAGE

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

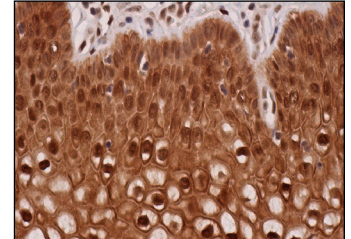
RESEARCH USE

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

DATA



Fra-2 (H-103): sc-13017. Western blot analysis of Fra-2 expression in non-transfected 293T: sc-117752 (A), human Fra-2 transfected 293T: sc-176435 (B) and MCF7 (C) whole cell lysates.



Fra-2 (H-103): sc-13017. Immunoperoxidase staining of formalin fixed, paraffin-embedded human vagina tissue showing nuclear and cytoplasmic staining of squamous epithelial cells.

SELECT PRODUCT CITATIONS

- Li, J., et al. 2005. The role of c-Jun in the AP-1 activation induced by naturally occurring isothiocyanates. *Food Chem. Toxicol.* 43: 1373-1380.
- Wang, X., et al. 2006. The requirement for and changing composition of the activating protein-1 transcription factor during differentiation of human leukemia HL60 cells induced by 1,25-dihydroxyvitamin D₃. *Cancer Res.* 66: 4402-4409.
- Bozec, A., et al. 2008. Osteoclast size is controlled by Fra-2 through LIF/LIF-receptor signalling and hypoxia. *Nature* 454: 221-225.
- Eferl, R., et al. 2008. Development of pulmonary fibrosis through a pathway involving the transcription factor Fra-2/AP-1. *Proc. Natl. Acad. Sci. USA* 105: 10525-10530.
- Gray, L.T., et al. 2012. Tethering of the conserved piggyBac transposase fusion protein CSB-PGBD3 to chromosomal AP-1 proteins regulates expression of nearby genes in humans. *PLoS Genet.* 8: e1002972.

PROTOCOLS

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