SANTA CRUZ BIOTECHNOLOGY, INC.

Fra-2 (Q-20): sc-604

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 (Q-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus 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-604 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-604 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Fra-2 (Q-20) is recommended for detection of Fra-2 of mouse, rat, human and chicken 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 (Q-20) is also recommended for detection of Fra-2 in additional species, including equine, canine and bovine.

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

Molecular Weight of Fra-2: 40 kDa.

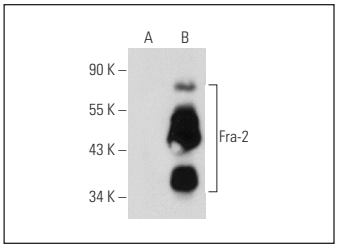
STORAGE

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

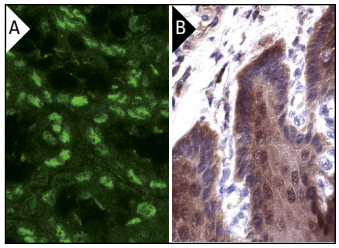
RESEARCH USE

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

DATA



Fra-2 (Q-20): sc-604. Western blot analysis of Fra-2 expression in non-transfected: sc-117752 (**A**) and human Fra-2 transfected: sc-176490 (**B**) 293T whole cell lysates.



Fra-2 (Q-20): sc-604. Immunofluorescence staining of normal mouse intestine frozen section showing nuclear staining (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human esophagus tissue showing nuclear and cytoplasmic staining of squamous epithelial cells (**B**).

SELECT PRODUCT CITATIONS

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3. Li, Z., et al. 2011. cAMP and fibroblast growth factor 2 regulate bone sialoprotein gene expression in human prostate cancer cells. Gene 471: 1-12.
4. Heldring, N., et al. 2011. Multiple sequence-specific DNA-sinding proteins mediate estrogen receptor signaling through a tethering pathway. Mol. Endocrinol. 25: 564-574.
5. Wang, S., et al. 2011. Transcriptional regulation of bone sialoprotein gene by interleukin-11. Gene 476: 46-55.
6. Wang, S., et al. 2011. Calcium hydroxide regulates bone sialoprotein gene transcription in human osteoblast-like Saos2 cells. J. Oral Sci. 53: 77-86.
7. Landreville, S., et al. 2011. Suppression of α5 gene expression is closely related to the tumorigenic properties of uveal melanoma cell lines. Pigment Cell Melanoma Res. 24: 643-655.
8. Kong, H.K., et al. 2012. The regulatory mechanism of the LY6K gene expression in human breast cancer cells. J. Biol. Chem. 287: 38889-38900.
9. Sundqvist, A., et al. 2012. Specific interactions between Smad proteins and AP-1 components determine TGFβ-induced breast cancer cell invasion. Oncogene 32: 3606-3615.