

JAB1 (FL-334): sc-9074

BACKGROUND

Genes belonging to the Jun and Fos oncogene families encode nuclear proteins that are found to be associated with a number of transcriptional complexes. The c-Jun protein is a major component of the transcription factor AP-1, originally shown to mediate phorbol ester tumor promoter (TPA)-induced expression of responsive genes through the TPA-response element (TRE). The Jun proteins form homo- and heterodimers which bind the TRE, but the Fos proteins are active only as heterodimers with any of the Jun proteins. Fos/Jun heterodimers have a much higher affinity for the TRE than Jun homodimers. Ha-Ras augments c-Jun activity and stimulates phosphorylation of its activation domain. The coactivator of Jun, designated JAB1 (for Jun-activation domain-binding protein), interacts with c-Jun and Jun D, but not with Jun B or v-Jun. This interaction enhances the transactivating ability of Jun proteins by stabilizing their binding to the TRE. The gene encoding JAB1 maps to human chromosome 8q13.1.

CHROMOSOMAL LOCATION

Genetic locus: COPS5 (human) mapping to 8q13.1; Cops5 (mouse) mapping to 1 A2.

SOURCE

JAB1 (FL-334) is a rabbit polyclonal antibody raised against amino acids 1-334 representing full length JAB1 of mouse 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-9074 X, 200 µg/0.1 ml.

APPLICATIONS

JAB1 (FL-334) is recommended for detection of JAB1 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).

JAB1 (FL-334) is also recommended for detection of JAB1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for JAB1 siRNA (h): sc-35717, JAB1 siRNA (m): sc-35718, JAB1 shRNA Plasmid (h): sc-35717-SH, JAB1 shRNA Plasmid (m): sc-35718-SH, JAB1 shRNA (h) Lentiviral Particles: sc-35717-V and JAB1 shRNA (m) Lentiviral Particles: sc-35718-V.

JAB1 (FL-334) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

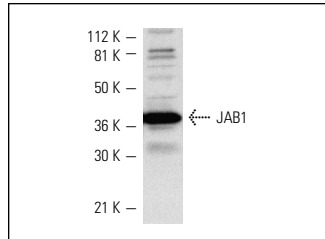
Molecular Weight of JAB1: 38 kDa.

Positive Controls: rat liver extract: sc-2395, Caki-1 cell lysate: sc-2224 or Jurkat whole cell lysate: sc-2204.

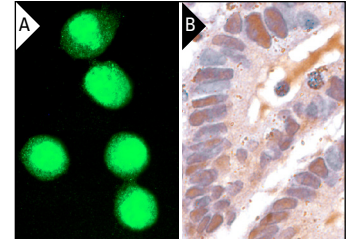
STORAGE

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

DATA



JAB1 (FL-334): sc-9074. Western blot analysis of JAB1 expression in rat liver extract.



JAB1 (FL-334): sc-9074. Immunofluorescence staining of methanol-fixed KNRK cells showing nuclear localization (A). Immunoperoxidase staining of formalin-fixed, paraffin-embedded human colon tumor showing nuclear staining (B).

SELECT PRODUCT CITATIONS

- Church, D.R., et al. 2005. Induction of AP-1 activity by androgen activation of the androgen receptor in LNCaP human prostate carcinoma cells. *Prostate* 63: 155-168.
- Zhang, F., et al. 2006. Molecular cloning and characterization of human Aph2 gene, involved in AP-1 regulation by interaction with JAB1. *Biochim. Biophys. Acta* 1759: 514-525.
- Lue, H., et al. 2007. Macrophage migration inhibitory factor (MIF) promotes cell survival by activation of the Akt pathway and role for CSN5/JAB1 in the control of autocrine MIF activity. *Oncogene* 26: 5046-5059.
- Berg, J.P., et al. 2007. Inverse expression of Jun activation domain binding protein 1 and cell cycle inhibitor p27^{Kip1}: influence on proliferation in hepatocellular carcinoma. *Hum. Pathol.* 38: 1621-1627.
- Kelly-Spratt, K.S., et al. 2009. Inhibition of PI-3K restores nuclear p27^{Kip1} expression in a mouse model of Kras-driven lung cancer. *Oncogene* 28: 3652-3662.
- Orel, L., et al. 2010. Crosstalk between the NFκB activating IKK-complex and the CSN signalosome. *J. Cell. Mol. Med.* 14: 1555-1568.
- Cheng, R.J., et al. 2011. Expression of macrophage migration inhibitory factor and CD74 in cervical squamous cell carcinoma. *Int. J. Gynecol. Cancer* 21: 1004-1012.

RESEARCH USE

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



Try **JAB1 (B-7): sc-13157** or **JAB1 (G-10): sc-393725**, our highly recommended monoclonal alternatives to JAB1 (FL-334). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **JAB1 (B-7): sc-13157**.