

# JAB1 (G-10): sc-393725

## 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 (G-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 2-21 at the N-terminus of JAB1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2b</sub> 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-393725 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-393725 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

JAB1 (G-10) is recommended for detection of JAB1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000). JAB1 (G-10) is also recommended for detection of JAB1 in additional species, including 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 (G-10) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

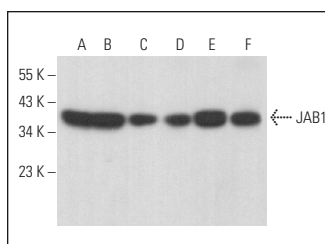
Molecular Weight of JAB1: 38 kDa.

Positive Controls: Caki-1 cell lysate: sc-2224, HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

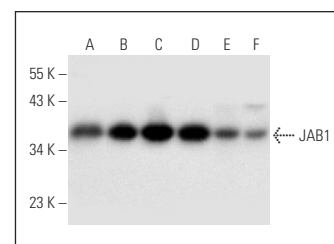
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



JAB1 (G-10): sc-393725. Western blot analysis of JAB1 expression in MCF7 (A), T-47D (B), HEL 92.1.7 (C), 3T3-L1 (D) and BYDP (E) whole cell lysates and mouse postnatal kidney tissue extract (F).



JAB1 (G-10): sc-393725. Western blot analysis of JAB1 expression in Caki-1 (A), HeLa (B), Jurkat (C) and U-87 MG (D) whole cell lysates and rat liver (E) and human liver (F) tissue extracts.

## SELECT PRODUCT CITATIONS

- Mosadeghi, R., et al. 2016. Structural and kinetic analysis of the COP9-Signalosome activation and the Cullin-RING ubiquitin ligase deneddylation cycle. *Elife* 5: e12102.
- Reitsma, J.M., et al. 2017. Composition and regulation of the cellular repertoire of SCF ubiquitin ligases. *Cell* 171: 1326-1339.e14.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## CONJUGATES

See **JAB1 (B-7): sc-13157** for JAB1 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.