SANTA CRUZ BIOTECHNOLOGY, INC.

Ajuba (F-9): sc-514001

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The LIM protein Ajuba (JUB), a member of the Zyxin family, mediates various cellular events. Ajuba is a component of the IL-1 signaling pathway modulating IL-1-induced NFκB activation by influencing the assembly and activity of the αPKC/p62/TRAF6 multiprotein signaling complex. Ajuba also plays a role in cadherin-mediated cell-cell adhesion and influences cell migration by regulating PIP2 synthesis through direct activation of PIPKIα activity. Differentiating mouse embryonic stem cells show elevated Ajuba transcription. In adult mouse tissues, Ajuba is present in skin, brain and genitourinary organs. Immunofluorescence analysis of unsynchronized HeLa cells shows cytoplasmic staining. In cells synchronized at G_2/M, Ajuba localizes to the centrosome, where it complexes with LATS2 to regulate the organization of the spindle apparatus through recruitment of γ Tubulin.

REFERENCES

1. Goyal, R.K., et al. 1999. Ajuba, a novel LIM protein, interacts with GRB2, augments mitogen-activated protein kinase activity in fibroblasts and promotes meiotic maturation of *Xenopus* oocytes in a GRB2- and Ras-dependent manner. Mol. Cell. Biol. 19: 4379-4389.
2. Marie, H., et al. 2002. The amino-terminus of the glial glutamate transporter GLT-1 interacts with the LIM protein Ajuba. Mol. Cell. Neurosci. 19: 152-164.
3. Petit, M.M., et al. 2005. The tumor suppressor Scrib interacts with the Zyxin-related protein LPP, which shuttles between cell adhesion sites and the nucleus. BMC Cell Biol. 6: 1.
4. Pratt, S.J., et al. 2005. The LIM protein Ajuba influences p130Cas localization and Rac 1 activity during cell migration. J. Cell Biol. 168: 813-824.
5. Feng, Y. and Longmore, G.D. 2005. The LIM protein Ajuba influences interleukin-1-induced NFκB activation by affecting the assembly and activity of the PKCζ/p62/TRAF6 signaling complex. Mol. Cell. Biol. 25: 4010-4022.

CHROMOSOMAL LOCATION

Genetic locus: AJUBA (human) mapping to 14q11.2; Ajuba (mouse) mapping to 14 C3.

SOURCE

Ajuba (F-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 223-245 within an internal region of Ajuba of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 lambda light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-514001 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

Ajuba (F-9) is recommended for detection of Ajuba 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).

Suitable for use as control antibody for Ajuba siRNA (h): sc-60066, Ajuba siRNA (m): sc-60067, Ajuba shRNA Plasmid (h): sc-60066-SH, Ajuba shRNA Plasmid (m): sc-60067-SH, Ajuba shRNA (h) Lentiviral Particles: sc-60066-V and Ajuba shRNA (m) Lentiviral Particles: sc-60067-V.

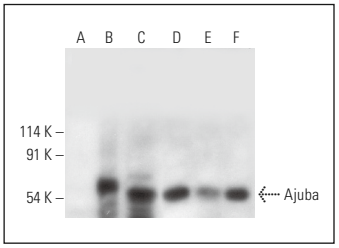
Molecular Weight of Ajuba: 55-60 kDa.

Positive Controls: Ajuba (h2): 293T Lysate: sc-170504, PC-3 cell lysate: sc-2220 or HeLa whole cell lysate: sc-2200.

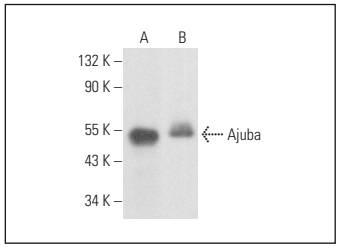
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGλ BP-HRP: sc-516132 or m-IgGλ BP-HRP (Cruz Marker): sc-516132-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-IgGλ BP-FITC: sc-516185 or m-IgGλ BP-PE: sc-516186 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Ajuba (F-9): sc-514001. Western blot analysis of Ajuba expression in non-transfected 293T: sc-117752 (**A**), human Ajuba transfected 293T: sc-170504 (**B**), Hep G2 (**C**), PC-3 (**D**), Caco-2 (**E**) and HeLa (**F**) whole cell lysates.



Ajuba (F-9): sc-514001. Western blot analysis of Ajuba expression in Hep G2 (**A**) and 3T3-L1 (**B**) whole cell lysates.

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 for detailed protocols and support products.