# Ajuba (h2): 293T Lysate: sc-170504



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 NF $\kappa$ B activation by influencing the assembly and activity of the  $\alpha$ PKC/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 PIPKI $\alpha$  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  $\gamma$  Tubulin.

#### **REFERENCES**

- Goyal, R.K., Lin, P., Kanungo, J., Payne, A.S., Muslin, A.J. and Longmore, G.D. 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., Billups, D., Bedford, F.K., Dumoulin, A., Goyal, R.K., Longmore, G.D., Moss, S.J. and Attwell, D. 2002. The amino-terminus of the glial glutamate transporter GLT-1 interacts with the LIM protein Ajuba. Mol. Cell. Neurosci. 19: 152-164.
- 3. Marie, H., Pratt, S.J., Betson, M., Epple, H., Kittler, J.T., Meek, L., Moss, S.J., Troyanovsky, S., Attwell, D., Longmore, G.D., and Braga, V.M. 2003. The LIM protein Ajuba is recruited to cadherin-dependent cell junctions through an association with  $\alpha$ -catenin. J. Biol. Chem. 278: 1220-1228.
- Petit, M.M., Meulemans, S.M., Alen, P., Ayoubi, T.A., Jansen, E. and Van de Ven, W.J. 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.
- Benzinger, A., Muster, N., Koch, H.B., Yates, J.R., 3rd and Hermeking, H. 2005. Targeted proteomic analysis of 14-3-3 σ, a p53 effector commonly silenced in cancer. Mol. Cell. Proteomics 4: 785-795.
- 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 PKC ζ/p62/TRAF6 signaling complex. Mol. Cell. Biol. 25: 4010-4022.
- Pratt, S.J., Epple, H., Ward, M., Feng, Y., Braga, V.M. and Longmore, G.D. 2005. The LIM protein Ajuba influences p130Cas localization and Rac1 activity during cell migration. J. Cell Biol. 168: 813-824.

# CHROMOSOMAL LOCATION

Genetic locus: AJUBA (human) mapping to 14q11.2.

## **PRODUCT**

Ajuba (h2): 293T Lysate represents a lysate of human Ajuba transfected 293T cells and is provided as 100 μg protein in 200 μl SDS-PAGE buffer.

### **APPLICATIONS**

Ajuba (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Ajuba antibodies. Recommended use: 10-20 µl per lane.

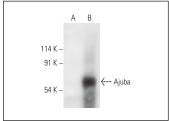
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Ajuba (F-9): sc-514001 is recommended as a positive control antibody for Western Blot analysis of enhanced human Ajuba expression in Ajuba transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

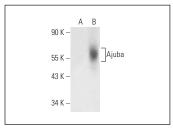
#### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\lambda$  BP-HRP: sc-516132 or m-lgG $\lambda$  BP-HRP (Cruz Marker): sc-516132-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz $^{\circ}$  Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

#### **DATA**







Ajuba (B-3): sc-398008. Western blot analysis of Ajuba expression in non-transfected: sc-117752 (A) and human Ajuba transfected: sc-170504 (B) 293T whole cell lysates.

#### **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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.