

Ajuba (B-3): sc-398008

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 κ B activation by influencing the assembly and activity of the α PKC/p62/TRAFF6 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 PIPK1 α 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 G₂/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. Marie, H., et al. 2003. The LIM protein Ajuba is recruited to cadherin-dependent cell junctions through an association with α -catenin. *J. Biol. Chem.* 278: 12220-12228.

CHROMOSOMAL LOCATION

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

SOURCE

Ajuba (B-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 67-94 near the N-terminus of Ajuba of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Ajuba (B-3) is available conjugated to agarose (sc-398008 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398008 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398008 PE), fluorescein (sc-398008 FITC), Alexa Fluor[®] 488 (sc-398008 AF488), Alexa Fluor[®] 546 (sc-398008 AF546), Alexa Fluor[®] 594 (sc-398008 AF594) or Alexa Fluor[®] 647 (sc-398008 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-398008 AF680) or Alexa Fluor[®] 790 (sc-398008 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398008 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

Alexa Fluor[®] is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

Ajuba (B-3) 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 μ g per 100-500 μ g 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.

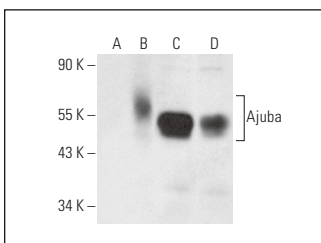
Molecular Weight of Ajuba: 55-60 kDa.

Positive Controls: Ajuba (h2): 293T Lysate: sc-170504, Hep G2 cell lysate: sc-2227 or Caco-2 cell lysate: sc-2262.

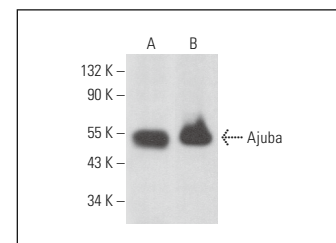
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



Ajuba (B-3): sc-398008. Western blot analysis of Ajuba expression in non-transfected 293T: sc-117752 (A), human Ajuba transfected 293T: sc-170504 (B), Hep G2 (C) and Caco-2 (D) whole cell lysates.



Ajuba (B-3): sc-398008. Western blot analysis of Ajuba expression in Hep G2 (A) and 3T3-L1 (B) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Shah, K.N., et al. 2019. Aurora kinase A drives the evolution of resistance to third-generation EGFR inhibitors in lung cancer. *Nat. Med.* 25: 111-118.

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.