SANTA CRUZ BIOTECHNOLOGY, INC.

Dab2 (C-20): sc-7832

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Dab1, a homolog of the *Drosophila* Disabled protein, is an adaptor protein involved in neural development. This cytoplasmic protein is tyrosine-phosphorylated during rapid expansion of the developing nervous system, and it is thought to interact with other proteins via a domain similar to the PTB domains of the Shc family. Dab1 has been shown to interact with the SH2 domains of Src, Fyn and Abl. Mutations in Dab1 result in widespread abnormalities in the brain, similar to those seen in Reelin mutants. Reelin is a secreted protein thought to play a role in directing migrating neurons. Evidence suggests that Dab1 functions downstream of Reelin in a signaling pathway involved in positioning cells in the developing brain. Dab2 (also designated DOC-2) is a mitogen-responsive phosphoprotein that binds the SH3 domain of GRB2, and it is thought to be a negative regulator of growth.

REFERENCES

1. Ogawa, M., et al. 1995. The Reeler gene-associated antigen on Cajal-Retzius neurons is a crucial molecule for laminar organization of cortical neurons. Neuron 14: 899-912.
2. Howell, B.W., et al. 1997. Mouse disabled (mDab1): a Src binding protein implicated in neuronal development. EMBO J. 16: 121-132.

CHROMOSOMAL LOCATION

Genetic locus: DAB2 (human) mapping to 5p13; Dab2 (mouse) mapping to 15.

SOURCE

Dab2 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Dab2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-7832 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Dab2 (C-20) is recommended for detection of Dab2 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Dab2 siRNA (h): sc-35167, Dab2 siRNA (m): sc-35168, Dab2 shRNA Plasmid (h): sc-35167-SH, Dab2 shRNA Plasmid (m): sc-35168-SH, Dab2 shRNA (h) Lentiviral Particles: sc-35167-V and Dab2 shRNA (m) Lentiviral Particles: sc-35168-V.

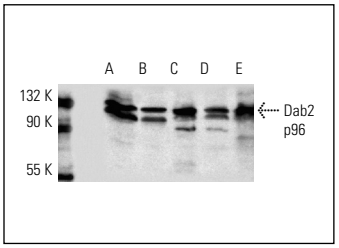
Molecular Weight of Dab2 spliced forms: 67-105 kDa.

Positive Controls: H4 cell lysate: sc-2408, Y79 cell lysate: sc-2240 or 3T3-L1 cell lysate: sc-2243.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Dab2 (C-20): sc-7832. Western blot analysis of Dab2 isoform expression in H4 (**A**), Y79 (**B**), 3T3-LI (**C**), F9 (**D**) whole cell lysates and rat embryo extract (**E**).

SELECT PRODUCT CITATIONS

1. Sirinian, M., et al. 2005. Adaptor protein ARH is recruited to the plasma membrane by low density lipoprotein (LDL) binding and modulates endocytosis of the LDL/LDL receptor complex in hepatocytes. J. Biol. Chem. 280: 38416-38423.
2. Ceelen, W., et al. 2007. Recombinant human erythropoietin α modulates the effects of radiotherapy on colorectal cancer microvessels. Br. J. Cancer 96: 692-700.

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 or our catalog for detailed protocols and support products.