

Dab2 (D-19): sc-7828

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

- Howell, B.W., Gertler, F.B. and Cooper, J.A. 1997. Mouse disabled (mDab1): a Src binding protein implicated in neuronal development. *EMBO J.* 16: 121-132.
- Howell, B.W., Hawkes, R., Soriano, P., Cooper, J.A. 1997. Neuronal position in the developing brain is regulated by mouse disabled-1. *Nature* 389: 733-737.
- Ogawa, M., Miyata, T., Nakajima, K., Yagyu, K., Seike, M., Ikenaka, K., Yamamoto, H. and Mikoshiba, K. 1995. The reeler gene-associated antigen on Cajal-Retzius neurons is a crucial molecule for laminar organization of cortical neurons. *Neuron* 14: 899-912.
- Rice, D.S., Sheldon, M., D'Arcangelo, G., Nakajima, K., Goldowitz, D. and Curran, T. 1998. Disabled-1 acts downstream of reelin in a signaling pathway that controls laminar organization in the mammalian brain. *Development* 125: 3719-3729.
- Xu, X.X., Yi, T., Tang, B., Lambeth, J.D. 1998. Disabled-2 (Dab2) is an SH3 domain-binding partner of Grb2. *Oncogene* 16:1561-1569.

CHROMOSOMAL LOCATION

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

SOURCE

Dab2 (D-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Dab2 of mouse 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-7828 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Dab2 (D-19) 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).

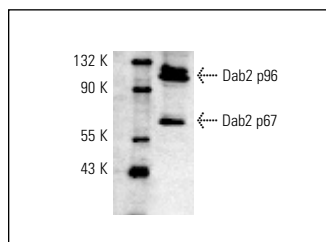
Dab2 (D-19) is also recommended for detection of Dab2 in additional species, including canine and bovine.

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: 67/93/96 kDa.

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

DATA



Dab2 (D-19): sc-7828. Western blot analysis of Dab2 isoform expression in H4 whole cell lysate.

SELECT PRODUCT CITATIONS

- Oleinikov, A.V., Zhao, J. and Makker, S.P. 2000. Cytosolic adaptor protein Dab2 is an intracellular ligand of endocytic receptor gp600/megalin. *Biochem. J.* 347: 613-621.
- Jechlinger, M., Grunert, S., Tamir, I.H., Janda, E., Lüdemann, S., Waerner, T., Seither, P., Weith, A., Beug, H. and Kraut, N. 2003. Expression profiling of epithelial plasticity in tumor progression. *Oncogene* 22: 7155-7169.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

MONOS
Satisfaction
Guaranteed

Try **Dab2 (E-11): sc-136964** or **Dab2 (C-1): sc-390942**, our highly recommended monoclonal alternatives to Dab2 (D-19).