

Dab2 (D-6): sc-136963

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

- 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.
- Howell, B.W., et al. 1997. Mouse disabled (mDab1): a Src binding protein implicated in neuronal development. *EMBO J.* 16: 121-132.
- Howell, B.W., et al. 1997. Neuronal position in the developing brain is regulated by mouse disabled-1. *Nature* 389: 733-737.

CHROMOSOMAL LOCATION

Genetic locus: DAB2 (human) mapping to 5p13.1; Dab2 (mouse) mapping to 15 A1.

SOURCE

Dab2 (D-6) is a mouse monoclonal antibody raised against amino acids 661-770 of Dab2 of human origin.

PRODUCT

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

APPLICATIONS

Dab2 (D-6) is recommended for detection of Dab2 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 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.

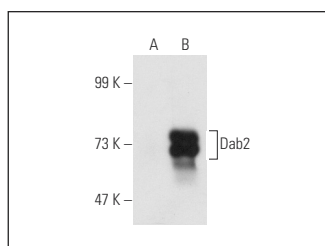
Molecular Weight of Dab2 isoforms: 67/93/96 kDa.

Positive Controls: Dab2 (m): 293T Lysate: sc-119651, RAW 264.7 whole cell lysate: sc-2211 or A-10 cell lysate: sc-3806.

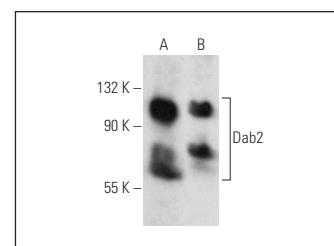
RECOMMENDED SUPPORT REAGENTS

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



Dab2 (D-6): sc-136963. Western blot analysis of Dab2 expression in non-transfected: sc-117752 (A) and mouse Dab2 transfected: sc-119651 (B) 293T whole cell lysates.



Dab2 (D-6): sc-136963. Western blot analysis of Dab2 expression in RAW 264.7 (A) and A-10 (B) whole cell lysates.

SELECT PRODUCT CITATIONS

- Bernardoni, R., et al. 2019. A new Bcr-Abl1 *Drosophila* model as a powerful tool to elucidate pathogenesis and progression of chronic myeloid leukemia. *Haematologica* 104: 717-728.

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.