

Dab2 (m): 293T Lysate: sc-119651

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., 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.
- 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. and Cooper, J.A. 1997. Neuronal position in the developing brain is regulated by mouse disabled-1. *Nature* 389: 733-737.
- 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. and Lambeth, J.D. 1998. Disabled-2 (Dab2) is an SH3 domain-binding partner of GRB2. *Oncogene* 16: 1561-1569.

CHROMOSOMAL LOCATION

Genetic locus: Dab2 (mouse) mapping to 15 A1.

PRODUCT

Dab2 (m): 293T Lysate represents a lysate of mouse Dab2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Dab2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Dab2 antibodies. Recommended use: 10-20 µl per lane.

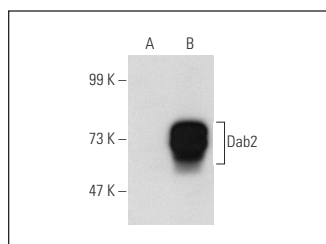
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Dab2 (E-11): sc-136964 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Dab2 expression in Dab2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

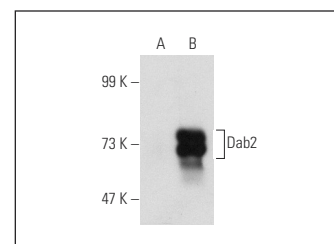
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
 1) Western Blotting: use m-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.

DATA



Dab2 (E-11): sc-136964. 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 non-transfected: sc-117752 (A) and mouse Dab2 transfected: sc-119651 (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.