SANTA CRUZ BIOTECHNOLOGY, INC.

Dab2 (E-11): sc-136964

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.

CHROMOSOMAL LOCATION

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

SOURCE

Dab2 (E-11) is a mouse monoclonal antibody raised against amino acids 661-770 of Dab2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Dab2 (E-11) is available conjugated to agarose (sc-136964 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-136964 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-136964 PE), fluorescein (sc-136964 FITC), Alexa Fluor® 488 (sc-136964 AF488), Alexa Fluor® 546 (sc-136964 AF546), Alexa Fluor® 594 (sc-136964 AF594) or Alexa Fluor® 647 (sc-136964 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-136964 AF680) or Alexa Fluor® 790 (sc-136964 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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

APPLICATIONS

Dab2 (E-11) 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), immunohistochemistry (including paraffin-embedded sections) (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.

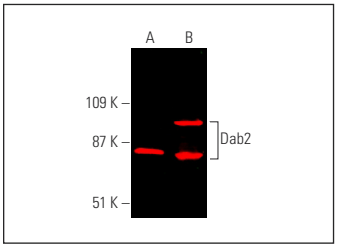
Molecular Weight of Dab2 isoforms: 67/93/96 kDa.

Positive Controls: human kidney extract: sc-363764, 3T3-L1 cell lysate: sc-2243 or KNRK whole cell lysate: sc-2214.

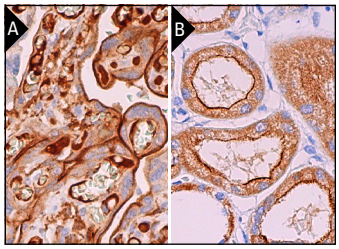
STORAGE

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

DATA



Dab2 (E-11): sc-136964. Near-infrared western blot analysis of Dab2 expression in human kidney tissue extract (**A**) and KNRK whole cell lysate (**B**). Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgGκ BP-CFL 790: sc-516181.



Dab2 (E-11): sc-136964. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing membrane and cytoplasmic staining of trophoblastic cells (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing apical membrane and cytoplasmic staining of cells in tubules (**B**).

SELECT PRODUCT CITATIONS

1. Li, P., et al. 2017. Expression and histopathological significance of disabled-2 in aldosterone-producing adenoma. Horm. Metab. Res. 49: 520-526.
2. Grabek, A., et al. 2019. The adult adrenal cortex undergoes rapid tissue renewal in a sex-specific manner. Cell Stem Cell 25: 290-296.e2.
3. Goldbraikh, D., et al. 2020. USP1 deubiquitinates Akt to inhibit PI3K-Akt-FoxO signaling in muscle during prolonged starvation. EMBO Rep. 21: e48791.
4. Theocharidis, G., et al. 2022. Single cell transcriptomic landscape of diabetic foot ulcers. Nat. Commun. 13: 181.
5. Ni, Y., et al. 2022. Tubule-mitophagic secretion of SerpinG1 reprograms macrophages to instruct anti-septic acute kidney injury efficacy of high-dose ascorbate mediated by NRF2 transactivation. Int. J. Biol. Sci. 18: 5168-5184.
6. Machino, H., et al. 2023. Integrative analysis reveals early epigenetic alterations in high-grade serous ovarian carcinomas. Exp. Mol. Med. 55: 2205-2219.

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.