SANTA CRUZ BIOTECHNOLOGY, INC.

Dab1 (E-19): sc-7827



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 AbI. 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: DAB1 (human) mapping to 1p32.2; Dab1 (mouse) mapping to 4 C6.

SOURCE

Dab1 (E-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Dab1 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-7827 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Dab1 (E-19) is recommended for detection of Dab1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Dab1 (E-19) is also recommended for detection of Dab1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Dab1 siRNA (h): sc-35165, Dab1 siRNA (m): sc-35166, Dab1 shRNA Plasmid (h): sc-35165-SH, Dab1 shRNA Plasmid (m): sc-35166-SH, Dab1 shRNA (h) Lentiviral Particles: sc-35165-V and Dab1 shRNA (m) Lentiviral Particles: sc-35166-V.

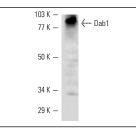
Molecular Weight of Dab1: 80 kDa.

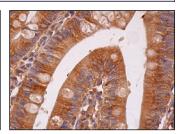
Positive Controls: rat brain extract: sc-2392 or SK-N-MC cell lysate: sc-2237.

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. 4) Immuno-histochemistry: use ImmunoCruz[™]: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA





Dab1 (E-19): sc-7827. Western blot analysis of Dab1 expression in rat brain tissue.

Dab1 (E-19): sc-7827. Immunoperoxidase staining of formalin fixed, paraffin-embedded small intestine tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Feng, L., Allen, N.S., Simo, S. and Cooper, J.A. 2007. Cullin 5 regulates Dab1 protein levels and neuron positioning during cortical development. Genes Dev. 21: 2717-2730.

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.

MONOS Satisfation Guaranteed Try Dab1 (G-5): sc-271136, our highly recommended monoclonal alternative to Dab1 (E-19).