# SANTA CRUZ BIOTECHNOLOGY, INC.

# Dab1 (H-103): sc-13981



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

## SOURCE

Dab1 (H-103) is a rabbit polyclonal antibody raised against amino acids 451-553 of Dab1 of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## **STORAGE**

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

## APPLICATIONS

Dab1 (H-103) 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 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).

Dab1 (H-103) is also recommended for detection of Dab1 in additional species, including equine, canine, bovine, porcine and avian.

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: Dab1 (h): 293T Lysate: sc-112502, SK-N-MC cell lysate: sc-2237 or rat brain extract: sc-2392.

## **RESEARCH USE**

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

#### DATA



Dab1 (H-103): sc-13981. Western blot analysis of Dab1 expression in non-transfected: sc-117752 (**A**) and human Dab1 transfected: sc-112502 (**B**) 293T whole cell lysates.



Dab1 (H-103): sc-13981. Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing cytoplasmic staining of glandular cells (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing cytoplasmic staining of glandular cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program (**B**).

## SELECT PRODUCT CITATIONS

- 1. Meyer, G., et al. 2003. Disabled-1 mRNA and protein expression in developing human cortex. Eur. J. Neurosci. 17: 517-525.
- Miyata, H., et al. 2004. Lissencephaly with agenesis of corpus callosum and rudimentary dysplastic cerebellum: a subtype of lissencephaly with cerebellar hypoplasia. Acta Neuropathol. 107: 69-81.
- McAvoy, S., et al. 2008. Disabled-1 is a large common fragile site gene, inactivated in multiple cancers. Genes Chromosomes Cancer 47: 165-174.
- Bior, B.K. and Ballif, B.A. 2013. Dab1 stabilizes its interaction with Cin85 by suppressing Cin85 phosphorylation at serine 587. FEBS Lett. 587: 60-66.
- 5. Jin, K., et al. 2015. Tfap2a and 2b act downstream of Ptf1a to promote amacrine cell differentiation during retinogenesis. Mol. Brain 8: 28.

## 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 (H-103).