

p-Dab2 (Ser 24): sc-32573

BACKGROUND

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. Dab2 Ser 24 phosphorylation promotes membrane translocation of Dab2 and its subsequent interaction with Integrin β 3, thereby defining a mechanism for Dab2 in regulating CD61 activation and inside-out signaling. Dab2 Ser 24 phosphorylation is also involved in the negative regulation of CD61-induced T cell factor (TCF) transcriptional activity. Dab2 elicits distinct regulatory mechanisms in CD61 and β -catenin/plakoglobin signaling in a Ser 24 phosphorylation-dependent and -independent manner, respectively. Dab1, a homolog of the *Drosophila* disabled protein, is an adaptor protein involved in neural development.

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.

CHROMOSOMAL LOCATION

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

SOURCE

p-Dab2 (Ser 24) is a rabbit polyclonal antibody raised against a short amino acid sequence containing Ser 24 phosphorylated Dab2 of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-32573 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

p-Dab2 (Ser 24) is recommended for detection of Ser 24 phosphorylated Dab2 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

p-Dab2 (Ser 24) is also recommended for detection of correspondingly phosphorylated Dab2 in additional species, including canine, bovine and porcine.

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.

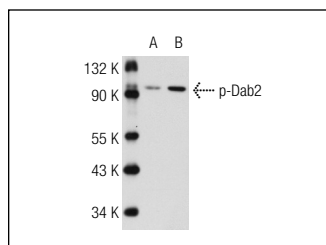
Molecular Weight of p-Dab2 isoforms: 67-105 kDa.

Positive Controls: Dab2 (h2): 293T Lysate: sc-172931.

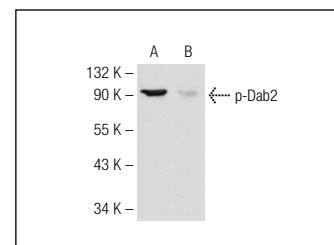
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent), Western Blotting Luminol Reagent: sc-2048 and Lambda Phosphatase: sc-200312A. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



p-Dab2 (Ser 24): sc-32573. Western blot analysis of Dab2 phosphorylation in non-transfected: sc-117752 (A) and human Dab2 transfected: sc-172931 (B) 293T whole cell lysates.



p-Dab2 (Ser 24): sc-32573. Western blot analysis of Dab2 phosphorylation in untreated (A) and lambda protein phosphatase (sc-200312A) treated HeLa whole cell lysates (B).

SELECT PRODUCT CITATIONS

- Chetrit, D., et al. 2009. Dab2 regulates clathrin assembly and cell spreading. *Biochem. J.* 418: 701-715.
- Ahn, M., et al. 2011. Immunohistochemical studies on disabled-2 protein in the spinal cords of rats with experimental autoimmune encephalomyelitis. *Brain Res.* 1416: 51-60.

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 or our catalog for detailed protocols and support products.