

TAB3 (H-128): sc-67112

BACKGROUND

TAB1, TAB2 and TAB3 (for TAK1 binding proteins) interact with the MAPKKK TAK1 in response to various stimuli. TAB1 activates TAK1 in TGF β -mediated signaling. In response to proinflammatory signals, TAB2 complexes with TRAF6 and TAK1, leading to translocation of the complex from the membrane to the cytosol and the subsequent activation of TAK1. When overexpressed, TAB3 activates both NF κ B and AP-1 transcription factors. In response to TNF α or IL-1, TAK1 complexes with TAB1 and TAB2 or with TAB1 and TAB3 to yield two distinct complexes. Both TAB2 and TAB3 are important mediators of TAK1 activation in IL-1 and TNF signal transduction.

REFERENCES

1. Yamaguchi, K., et al. 1995. Identification of a member of the MAPKKK family as a potential mediator of TGF β signal transduction. *Science* 270: 2008-2011.
2. Shibuya, H., et al. 1996. TAB1: an activator of the TAK1 MAPKKK in TGF β signal transduction. *Science* 272: 1179-1182.
3. Ge, B., et al. 2002. MAPKK-independent activation of p38 α mediated by TAB1-dependent autophosphorylation of p38 α . *Science* 295: 1291-1294.
4. Jiang, Z, et al. 2002. Interleukin-1 (IL-1) receptor-associated kinase-dependent IL-1-induced signaling complexes phosphorylate TAK1 and TAB2 at the plasma membrane and activate TAK1 in the cytosol. *Mol. Cell. Biol.* 22: 7158-7167.
5. Ishitani, T., et al. 2003. Role of the TAB2-related protein TAB3 in IL-1 and TNF signaling. *EMBO J.* 22: 6277-6288.
6. Kanayama, A., et al. 2004. TAB2 and TAB3 activate the NF κ B pathway through binding to polyubiquitin chains. *Mol. Cell* 15: 535-548.
7. Jin, G., et al. 2004. Identification of a human NF κ B-activating protein, TAB3. *Proc. Natl. Acad. Sci. USA* 101: 2028-2033.
8. Cheung, P.C., et al. 2004. TAB3, a new binding partner of the protein kinase TAK1. *Biochem. J.* 378: 27-34.

CHROMOSOMAL LOCATION

Genetic locus: TAB3 (human) mapping to Xp21.2; Map3k7ip3 (mouse) mapping to X C1.

SOURCE

TAB3 (H-128) is a rabbit polyclonal antibody raised against amino acids 49-176 mapping near the N-terminus of TAB3 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

TAB3 (H-128) is recommended for detection of TAB3 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).

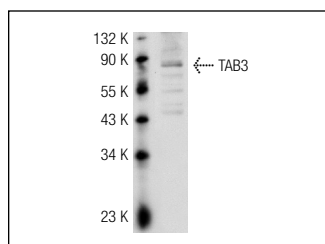
TAB3 (H-128) is also recommended for detection of TAB3 in additional species, including equine and avian.

Suitable for use as control antibody for TAB3 siRNA (h): sc-43548, TAB3 siRNA (m): sc-43549, TAB3 shRNA Plasmid (h): sc-43548-SH, TAB3 shRNA Plasmid (m): sc-43549-SH, TAB3 shRNA (h) Lentiviral Particles: sc-43548-V and TAB3 shRNA (m) Lentiviral Particles: sc-43549-V.

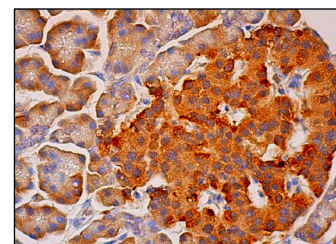
Molecular Weight of TAB3: 90 kDa.

Positive Controls: c4 whole cell lysate: sc-364186 or Hep G2 cell lysate: sc-2227.

DATA



TAB3 (H-128): sc-67112. Western blot analysis of TAB3 expression in c4 whole cell lysate.



TAB3 (H-128): sc-67112. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of exocrine glandular cells and Islets of Langerhans.

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.



Try **TAB3 (D-9): sc-166538**, our highly recommended monoclonal alternative to TAB3 (H-128).