

TAB2 (H-300): sc-20756

BACKGROUND

The TAK1 binding proteins, TAB1, TAB2 and TAB3, interact with the MAPKKK TAK1 in response to various stimuli. TAB1 activates TAK1 in TGF β mediated signaling. TAB1 also plays a central role in a p38 α activation pathway that is independent of MAPKK. 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.

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.

CHROMOSOMAL LOCATION

Genetic locus: MAP3K7IP2 (human) mapping to 6q25.1; Map3k7ip2 (mouse) mapping to 10 A1.

SOURCE

TAB2 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 of TAB2 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.

APPLICATIONS

TAB2 (H-300) is recommended for detection of TAB2 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).

Suitable for use as control antibody for TAB2 siRNA (h): sc-41049, TAB2 siRNA (m): sc-41050, TAB2 shRNA Plasmid (h): sc-41049-SH, TAB2 shRNA Plasmid (m): sc-41050-SH, TAB2 shRNA (h) Lentiviral Particles: sc-41049-V and TAB2 shRNA (m) Lentiviral Particles: sc-41050-V.

Molecular Weight of TAB2: 83 kDa.

Positive Controls: TAB2 (m): 293T Lysate: sc-123889 or A-431 whole cell lysate: sc-2201.

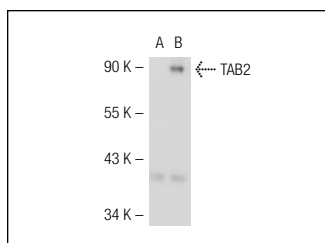
STORAGE

Store at 4 $^{\circ}$ 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.

DATA



TAB2 (H-300): sc-20756. Western blot analysis of TAB2 expression in non-transfected: sc-117752 (A) and mouse TAB2 transfected: sc-123889 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Kim, J.H., et al. 2005. Transcriptional regulation of a metastasis suppressor gene by TIP60 and β -catenin complexes. *Nature* 434: 921-926.
2. Yokota, S., et al. 2008. Measles virus P protein suppresses toll-like receptor signal through upregulation of ubiquitin-modifying enzyme A20. *FASEB J.* 22: 74-83.
3. Shi, M., et al. 2008. TRIM30 α negatively regulates TLR-mediated NF κ B activation by targeting TAB2 and TAB3 for degradation. *Nat. Immunol.* 9: 369-377.
4. Caldas-Lopes, E., et al. 2009. HSP 90 inhibitor PU-H71, a multimodal inhibitor of malignancy, induces complete responses in triple-negative breast cancer models. *Proc. Natl. Acad. Sci. USA* 106: 8368-8373.
5. Liu, Q., et al. 2009. Interaction between TAK1-TAB1-TAB2 and RCAN1-calcineurin defines a signalling nodal control point. *Nat. Cell Biol.* 11: 154-161.
6. Wu, Z.H., et al. 2010. ATM- and NEMO-dependent ELKS ubiquitination coordinates TAK1-mediated IKK activation in response to genotoxic stress. *Mol. Cell* 40: 75-86.
7. Venteclef, N., et al. 2010. GPS2-dependent corepressor/SUMO pathways govern anti-inflammatory actions of LRH-1 and LXR β in the hepatic acute phase response. *Genes Dev.* 24: 381-395.
8. Niu, J., et al. 2011. LUBAC regulates NF- κ B activation upon genotoxic stress by promoting linear ubiquitination of NEMO. *EMBO J.* 30: 3741-3753.



Try **TAB2 (E-5): sc-398188**, our highly recommended monoclonal alternative to TAB2 (H-300).