# TAB2 (E-20): sc-11850



The Power to Question

## **BACKGROUND**

The TAK1 binding proteins, TAB1, TAB2 and TAB3, interact with the MAPKKK TAK1 in response to various stimuli. TAB1 activates TAK1 in TGF $\beta$  mediated signaling. TAB1 also plays a central role in a p38 $\alpha$  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 $\alpha$ B and AP-1 transcription factors. In response to TNF $\alpha$  or IL-1, TAK1 complexes with TAB1 and TAB2 or with TAB1 and TAB3 to yield two distinct complexes.

# **REFERENCES**

- 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: TAB2 (human) mapping to 6q25.1; Tab2 (mouse) mapping to 10 A1.

### SOURCE

TAB2 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TAB2 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.

Blocking peptide available for competition studies, sc-11850 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

TAB2 (E-20) is recommended for detection of TAB2 of mouse 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).

TAB2 (E-20) is also recommended for detection of TAB2 in additional species, including equine, canine, bovine and avian.

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.

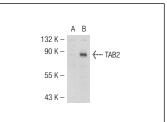
Molecular Weight of TAB2: 83 kDa.

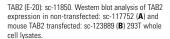
Positive Controls: TAB2 (m): 293T Lysate: sc-123889 or A-431 whole cell lysate: sc-2201.

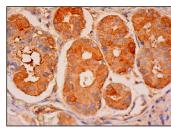
#### **RECOMMENDED SECONDARY REAGENTS**

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) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

# DATA







TAB2 (E-20): sc-11850. Immunoperoxidase staining of formalin fixed, paraffin-embedded human salivary gland tissue showing cytoplasmic staining of glandular cells

# **SELECT PRODUCT CITATIONS**

- Kamiyama, H., et al. 2008. Epoxyquinol B, a naturally occurring pentaketide dimer, inhibits NFκB signaling by crosslinking TAK1. Biosci. Biotechnol. Biochem. 72: 1894-1900.
- Cutrupi, S., et al. 2012. Targeting of the adaptor protein Tab2 as a novel approach to revert tamoxifen resistance in breast cancer cells. Oncogene 31: 4353-4361.

### **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.

MONOS Satisfation Guaranteed

Try **TAB2 (E-5): sc-398188**, our highly recommended monoclonal alternative to TAB2 (E-20).

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