

# TRAF2 (H-249): sc-7187



The Power to Question

## BACKGROUND

Tumor necrosis factor (TNF)-activated cell signaling is mediated primarily through the TNF receptor 1 (TNF-R1) and, to a lesser extent, TNF-R2. Both TNF receptors are members of the expanding TNF receptor superfamily which includes the Fas antigen and CD40. Potential insight into an understanding of TNF receptor-mediated signaling was provided by the identification of two related proteins, TRAF1 and TRAF2 (for TNF receptor-associated factors 1 and 2, respectively). Both function to form heterodimeric complexes and associate with the cytoplasmic domain of TNF-R2. A third member of this protein family, alternatively designated CD40 bp, CRAF1, LAP1 or TRAF3, has been identified and shown to associate with the cytoplasmic domain of CD40. The similarity through a specific region of TRAF3 with regions of TRAF1 and TRAF2 define a "TRAF-C" domain that is necessary and sufficient for CD40 binding and homodimerization.

## CHROMOSOMAL LOCATION

Genetic locus: TRAF2 (human) mapping to 9q34.3; Traf2 (mouse) mapping to 2 A3.

## SOURCE

TRAF2 (H-249) is a rabbit polyclonal antibody raised against amino acids 1-249 of TRAF2 of human origin.

## PRODUCT

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

## APPLICATIONS

TRAF2 (H-249) is recommended for detection of TRAF2 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).

TRAF2 (H-249) is also recommended for detection of TRAF2 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for TRAF2 siRNA (h): sc-29509, TRAF2 siRNA (m): sc-36711, TRAF2 shRNA Plasmid (h): sc-29509-SH, TRAF2 shRNA Plasmid (m): sc-36711-SH, TRAF2 shRNA (h) Lentiviral Particles: sc-29509-V and TRAF2 shRNA (m) Lentiviral Particles: sc-36711-V.

Molecular Weight of TRAF2: 50 kDa.

Positive Controls: TRAF2 (h6): 293T Lysate: sc-172765.

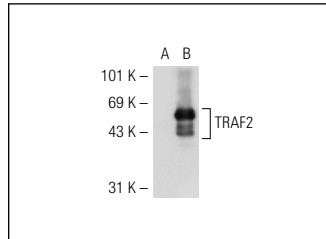
## STORAGE

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

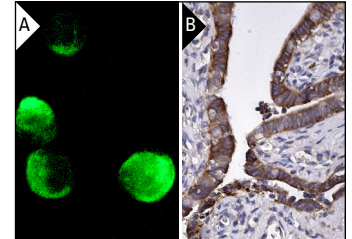
## RESEARCH USE

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

## DATA



TRAF2 (H-249): sc-7187. Western blot analysis of TRAF2 expression in non-transfected: sc-117752 (A) and human TRAF2 transfected: sc-172765 (B) 293T whole cell lysates.



TRAF2 (H-249): sc-7187. Immunofluorescence staining of methanol-fixed Jurkat cells showing cytoplasmic staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube tissue showing cytoplasmic staining of glandular cells (B).

## SELECT PRODUCT CITATIONS

1. Yui, D., et al. 2001. Interchangeable binding of Bcl10 to TRAF2 and cIAPs regulates apoptosis signaling. *Oncogene* 20: 4317-4323.
2. Poppelmann, B., et al. 2005. NFκB-dependent down-regulation of tumor necrosis factor receptor-associated proteins contributes to interleukin-1-mediated enhancement of ultraviolet B-induced apoptosis. *J. Biol. Chem.* 280: 15635-15643.
3. Varfolomeev, E., et al. 2005. Molecular determinants of kinase pathway activation by Apo2 ligand/tumor necrosis factor-related apoptosis-inducing ligand. *J. Biol. Chem.* 280: 40599-40608.
4. Yamaguchi, T., et al. 2009. JNK-binding protein 1 regulates NFκB activation through TRAF2 and TAK1. *Cell Biol. Int.* 33: 364-368.
5. Bista, P., et al. 2010. TRAF3 controls activation of the canonical and alternative NFκB by the lymphotoxin β receptor. *J. Biol. Chem.* 285: 12971-12978.
6. Sughra, K., et al. 2010. Interaction of the TNFR-receptor associated factor TRAF1 with IκB kinase-2 and TRAF2 indicates a regulatory function for NFκB signaling. *PLoS ONE* 5: e12683.
7. Ramakrishnan, P., et al. 2011. Sam68 is required for both NFκB activation and apoptosis signaling by the TNF receptor. *Mol. Cell* 43: 167-179.
8. Rauert, H., et al. 2011. TNFR1 and TNFR2 regulate the extrinsic apoptotic pathway in myeloma cells by multiple mechanisms. *Cell Death Dis.* 2: e194.
9. Ganef, C., et al. 2011. Induction of the alternative NFκB pathway by lymphotoxin αβ (LTαβ) relies on internalization of LTβ receptor. *Mol. Cell Biol.* 31: 4319-4334.



Try **TRAF2 (F-2): sc-136999** or **TRAF2 (F-4): sc-137048**, our highly recommended monoclonal alternatives to TRAF2 (H-249). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **TRAF2 (F-2): sc-136999**.