

TRAF1 (H-186): sc-7186



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 between 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.

REFERENCES

1. Tartaglia, L.A., et al. 1992. Two TNF receptors. *Immunol. Today* 13: 151-153.
2. Smith, C.A., et al. 1994. The TNF receptor superfamily of cellular and viral proteins: activation, costimulation, and death. *Cell* 76: 959-962.
3. Hu, H.M., et al. 1994. A novel RING finger protein interacts with the cytoplasmic domain of CD40. *J. Biol. Chem.* 269: 30069-30072.

CHROMOSOMAL LOCATION

Genetic locus: TRAF1 (human) mapping to 9q33.2; Traf1 (mouse) mapping to 2 B.

SOURCE

TRAF1 (H-186) is a rabbit polyclonal antibody raised against amino acids 1-186 of TRAF1 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

TRAF1 (H-186) is recommended for detection of TRAF1 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TRAF1 siRNA (h): sc-29508, TRAF1 siRNA (m): sc-36710, TRAF1 shRNA Plasmid (h): sc-29508-SH, TRAF1 shRNA Plasmid (m): sc-36710-SH, TRAF1 shRNA (h) Lentiviral Particles: sc-29508-V and TRAF1 shRNA (m) Lentiviral Particles: sc-36710-V.

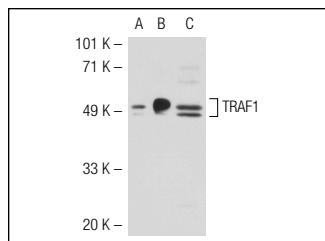
Molecular Weight of TRAF1: 52 kDa.

Positive Controls: TRAF1 (m): 293T Lysate: sc-127696, NTERA-2 cl.D1 whole cell lysate: sc-364181 or NIH/3T3 whole cell lysate: sc-2210.

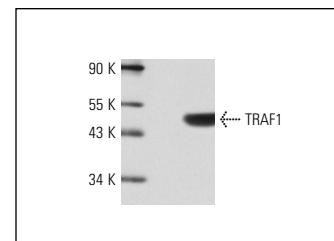
STORAGE

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

DATA



TRAF1 (H-186): sc-7186. Western blot analysis of TRAF1 expression in non-transfected 293T: sc-117752 (A), mouse TRAF1 transfected 293T: sc-127696 (B) and NTERA-2 cl.D1 (C) whole cell lysates.



TRAF1 (H-186): sc-7186. Western blot analysis of TRAF1 expression in TRAF1 transfected NIH/3T3 cells.

SELECT PRODUCT CITATIONS

1. Uchida, H., et al. 2003. 5-Fluorouracil efficiently enhanced apoptosis induced by adenovirus-mediated transfer of caspase-8 in DLD-1 colon cancer cells. *J. Gene Med.* 5: 287-299.
2. Aho, A.D., et al. 2003. Enhanced expression of interleukin-1α and tumor necrosis factor receptor-associated protein 1 in ileal tissues of cattle infected with *Mycobacterium avium* subspecies paratuberculosis. *Infect. Immun.* 71: 6479-6486.
3. Fotin-Mleczek, M., et al. 2004. Tumor necrosis factor receptor-associated factor (TRAF) 1 regulates CD40-induced TRAF2-mediated NF-κB activation. *J. Biol. Chem.* 279: 677-685.
4. Munro, P., et al. 2004. Activation and proteasomal degradation of Rho GTPases by CNF1 elicit a controlled inflammatory response. *J. Biol. Chem.* 279: 35849-35857.
5. Chiang, S.K., et al. 2007. Relationship between *Mycobacterium avium* subspecies paratuberculosis, IL-1α, and TRAF1 in primary bovine monocyte-derived macrophages. *Vet. Immunol. Immunopathol.* 116: 131-144.
6. Al-Taie, O.H., et al. 2009. Differential effects of PPARγ activation by the oral antidiabetic agent pioglitazone in Barrett's carcinoma *in vitro* and *in vivo*. *J. Gastroenterol.* 44: 919-929.

RESEARCH USE

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

MONOS
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Try **TRAF1 (H-3): sc-6253** or **TRAF1 (E-12): sc-271683**, our highly recommended monoclonal alternatives to TRAF1 (H-186). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **TRAF1 (H-3): sc-6253**.