

TRAF1 (H-125): sc-1830



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 CD40bp, 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.

CHROMOSOMAL LOCATION

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

SOURCE

TRAF1 (H-125) is a rabbit polyclonal antibody raised against amino acids 173-295 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-125) 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).

TRAF1 (H-125) is also recommended for detection of TRAF1 in additional species, including equine and bovine.

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.

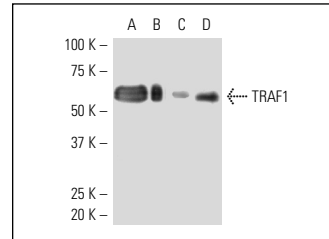
Molecular Weight of TRAF1: 52 kDa.

Positive Controls: TRAF1 (m): 293T Lysate: sc-127696, IB4 whole cell lysate: sc-364780 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

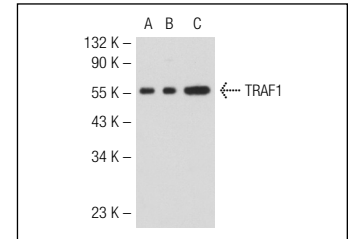
STORAGE

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

DATA



TRAF1 (H-125): sc-1830. Western blot analysis of TRAF1 expression in L75.11 (A), IB4 (B), WI 38 (C) and NTERA-2 cl.D1 (D) whole cell lysates.



TRAF1 (H-125): sc-1830. 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.

SELECT PRODUCT CITATIONS

1. Kreuz, S., et al. 2001. NFκB inducers upregulate cFLIP, a cycloheximide-sensitive inhibitor of death receptor signaling. *Mol. Cell. Biol.* 21: 3964-3973.
2. Henkler, F., et al. 2003. Caspase-mediated cleavage converts the tumor necrosis factor (TNF) receptor-associated factor (TRAF)-1 from a selective modulator of TNF receptor signaling to a general inhibitor of NFκB activation. *J. Biol. Chem.* 278: 29216-29230.
3. Fotin-Mleczek, M., et al. 2004. Tumor necrosis factor receptor-associated factor (TRAF) 1 regulates CD40-induced TRAF2-mediated NFκB activation. *J. Biol. Chem.* 279: 677-685.
4. 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.
5. Sughra, K., et al. 2010. Interaction of the TNFR-receptor associated factor TRAF1 with I-κ B kinase-2 and TRAF2 indicates a regulatory function for NF-κ B signaling. *PLoS ONE* 5: e12683.

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 **TRAF1 (H-3): sc-6253** or **TRAF1 (E-12): sc-271683**, our highly recommended monoclonal alternatives to TRAF1 (H-125). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **TRAF1 (H-3): sc-6253**.