

# TRAF2 (D-3): sc-136997

## 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. Rothe, M., et al. 1994. A novel family of putative signal transducers associated with the cytoplasmic domain of the 75 kDa tumor necrosis factor receptor. *Cell* 78: 681-692.
4. Hu, H.M., et al. 1994. A novel RING finger protein interacts with the cytoplasmic domain of CD40. *J. Biol. Chem.* 269: 30069-30072.
5. Mosiaios, G., et al. 1995. The Epstein-Barr virus transforming protein LMP1 engages signaling proteins for the tumor necrosis factor receptor family. *Cell* 80: 389-399.
6. Hsu, H., et al. 1995. The TNF receptor 1-associated protein TRADD signals cell death and NFκB activation. *Cell* 81: 495-504.
7. Cheng, G., et al. 1995. Involvement of CRAF1, a relative of TRAF, in CD40 signaling. *Science* 267: 1494-1498.

## CHROMOSOMAL LOCATION

Genetic locus: TRAF2 (human) mapping to 9q34.3.

## SOURCE

TRAF2 (D-3) is a mouse monoclonal antibody raised against amino acids 1-249 of TRAF2 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## 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.

## APPLICATIONS

TRAF2 (D-3) is recommended for detection of TRAF2 of human origin by Western Blotting (starting dilution 1:100, 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).

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

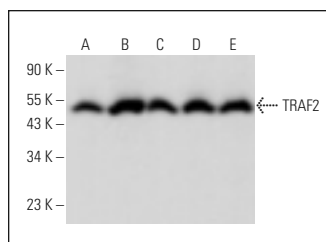
Molecular Weight of TRAF2: 50 kDa.

Positive Controls: T-47D cell lysate: sc-2293, SUP-T1 whole cell lysate: sc-364796 or ACHN whole cell lysate: sc-364365.

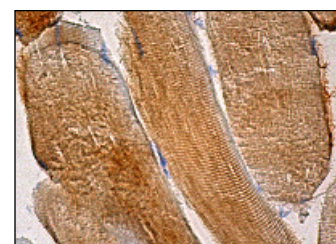
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



TRAF2 (D-3): sc-136997. Western blot analysis of TRAF2 expression in A549 (A), T-47D (B), SUP-T1 (C), ACHN (D) and SW480 (E) whole cell lysates.



TRAF2 (D-3): sc-136997. Immunoperoxidase staining of formalin fixed, paraffin-embedded human skeletal muscle tissue showing cytoplasmic staining of myocytes.

## SELECT PRODUCT CITATIONS

1. Gravina, G.L., et al. 2016. Increased expression and activity of p75NTR are crucial events in azacitidine-induced cell death in prostate cancer. *Oncol. Rep.* 36: 125-130.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.