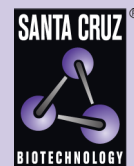


# TRAF2 (F-2): sc-136999



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.

## CHROMOSOMAL LOCATION

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

## SOURCE

TRAF2 (F-2) 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.

TRAF2 (F-2) is available conjugated to agarose (sc-136999 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-136999 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-136999 PE), fluorescein (sc-136999 FITC), Alexa Fluor® 488 (sc-136999 AF488), Alexa Fluor® 546 (sc-136999 AF546), Alexa Fluor® 594 (sc-136999 AF594) or Alexa Fluor® 647 (sc-136999 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-136999 AF680) or Alexa Fluor® 790 (sc-136999 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

TRAF2 (F-2) is recommended for detection of TRAF2 of mouse, rat and 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 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.

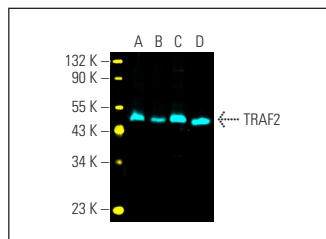
Molecular Weight of TRAF2: 50 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HeLa whole cell lysate: sc-2200 or U-87 MG cell lysate: sc-2411.

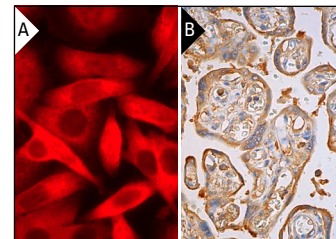
## STORAGE

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

## DATA



TRAF2 (F-2) Alexa Fluor® 647: sc-136999 AF647. Direct fluorescent western blot analysis of TRAF2 expression in Jurkat (A), U-87 MG (B) and HeLa (C) whole cell lysates and rat testis tissue extract (D). Blocked with UltraCruz® Blocking Reagent: sc-516214. Cruz Marker™ Molecular Weight Standards detected with Cruz Marker MW Tag-Alexa Fluor® 488: sc-516790.



TRAF2 (F-2) PE: sc-136999 PE. Direct immunofluorescence staining of formalin-fixed SW480 cells showing cytoplasmic and nuclear localization. Blocked with UltraCruz® Blocking Reagent: sc-516214 (A). TRAF2 (F-2) HRP: sc-136999 HRP. Direct immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic staining of trophoblastic cells. Blocked with 0.25X UltraCruz® Blocking Reagent: sc-516214 (B).

## SELECT PRODUCT CITATIONS

- Zemirli, N., et al. 2014. Mitochondrial hyperfusion promotes NFκB activation via the mitochondrial E3 ligase MULAN. *FEBS J.* 281: 3095-3112.
- Petersen, S.L., et al. 2015. TRAF2 is a biologically important necroptosis suppressor. *Cell Death Differ.* 22: 1846-1857.
- Stucky, A., et al. 2016. Prenatal cocaine exposure upregulates BDNF-TrkB signaling. *PLoS ONE* 11: e0160585.
- Geng, R., et al. 2017. RNF183 promotes proliferation and metastasis of colorectal cancer cells via activation of NFκB-IL-8 axis. *Cell Death Dis.* 8: e2994.
- Sambandam, Y., et al. 2018. Autoregulation of RANK ligand in oral squamous cell carcinoma tumor cells. *J. Cell. Physiol.* 233: 6125-6134.
- Ko, R., et al. 2019. Glycogen synthase kinase 3β regulates antiviral responses of TLR3 via TRAF2-Src axis. *J. Immunol.* 203: 2990-2999.
- Liu, Y., et al. 2020. TRIM25 promotes TNF-α-induced NFκB activation through potentiating the K63-linked ubiquitination of TRAF2. *J. Immunol.* 204: 1499-1507.
- Zhang, P., et al. 2021. K63-linked ubiquitination of DYRK1A by TRAF2 alleviates Sprouty 2-mediated degradation of EGFR. *Cell Death Dis.* 12: 608.
- Lim, M.C.C., et al. 2022. A20 undermines alternative NFκB activity and expression of anti-apoptotic genes in *Helicobacter pylori* infection. *Cell. Mol. Life Sci.* 79: 102.

## RESEARCH USE

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

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