

TRAF4 (B-9): sc-390232

BACKGROUND

The tumor necrosis factor family (TNF) receptor superfamily is composed of several type I integral membrane glycoproteins that exhibit homology in their cysteine-rich extracellular domains. Members of this family include TNF-RI, TNF-RII and CD40. Ligands for these receptors can be small, secreted proteins such as TNF or type II integral membrane proteins as is the case for the CD40 ligand, CD40L. While the signal transduction mechanism of the TNF receptor superfamily is poorly understood, activation of TNF-R or CD40 has been shown to induce the nuclear translocation of NFκB. Members of the TRAF (TNF receptor-associated factor) family have been implicated in this process. Four members have thus far been described and are designated TRAF1, TRAF2, TRAF3 (variously referred to as CRAF1, LAP1 or CD40bp) and TRAF4. TRAF4, originally termed CART1, is specifically expressed in breast carcinomas, and is localized to the nucleus in such tissues.

CHROMOSOMAL LOCATION

Genetic locus: TRAF4 (human) mapping to 17q11.2; Traf4 (mouse) mapping to 11 B5.

SOURCE

TRAF4 (B-9) is a mouse monoclonal antibody raised against amino acids 40-111 of TRAF4 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TRAF4 (B-9) is available conjugated to agarose (sc-390232 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390232 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390232 PE), fluorescein (sc-390232 FITC), Alexa Fluor® 488 (sc-390232 AF488), Alexa Fluor® 546 (sc-390232 AF546), Alexa Fluor® 594 (sc-390232 AF594) or Alexa Fluor® 647 (sc-390232 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390232 AF680) or Alexa Fluor® 790 (sc-390232 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

TRAF4 (B-9) is recommended for detection of TRAF4 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TRAF4 siRNA (h): sc-36713, TRAF4 siRNA (m): sc-36714, TRAF4 shRNA Plasmid (h): sc-36713-SH, TRAF4 shRNA Plasmid (m): sc-36714-SH, TRAF4 shRNA (h) Lentiviral Particles: sc-36713-V and TRAF4 shRNA (m) Lentiviral Particles: sc-36714-V.

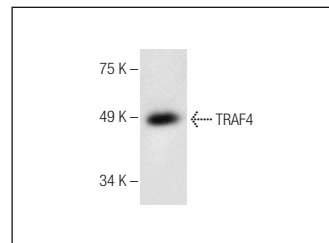
Molecular Weight of TRAF4: 53 kDa.

Positive Controls: SK-BR-3 cell lysate: sc-2218 or A-431 nuclear extract: sc-2122.

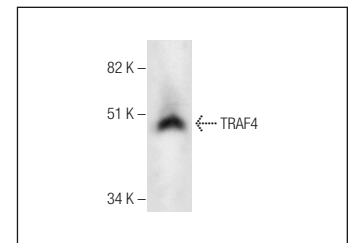
RECOMMENDED SUPPORT REAGENTS

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.

DATA



TRAF4 (B-9): sc-390232. Western blot analysis of TRAF4 expression in SK-BR-3 whole cell lysate.



TRAF4 (B-9): sc-390232. Western blot analysis of TRAF4 expression in A-431 nuclear extract.

SELECT PRODUCT CITATIONS

- Wu, J.R., et al. 2019. Hydrogen peroxide inducible clone-5 sustains NADPH oxidase-dependent reactive oxygen species-c-Jun N-terminal kinase signaling in hepatocellular carcinoma. *Oncogenesis* 8: 40.
- Li, J., et al. 2019. TRAF4 positively regulates the osteogenic differentiation of mesenchymal stem cells by acting as an E3 ubiquitin ligase to degrade Smurf2. *Cell Death Differ.* 26: 2652-2666.
- Cen, S., et al. 2020. TRAF4 acts as a fate checkpoint to regulate the adipogenic differentiation of MSCs by activating PKM2. *EBioMedicine* 54: 102722.
- Oh, J.H., et al. 2020. Elevated GCN5 expression confers tamoxifen resistance by upregulating AIB1 expression in ER-positive breast cancer. *Cancer Lett.* 495: 145-155.

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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.