SANTA CRUZ BIOTECHNOLOGY, INC.

TRAF4 (N-16): sc-1921



BACKGROUND

The tumor necrosis factor family (TNF) receptor superfamily is composed of several type I integral membrane glycoproteins that exhibit homology in their cystine-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 NF κ B. 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 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of TRAF4 of human origin.

PRODUCT

Each vial contains 200 μ g lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-1921 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

TRAF4 (N-16) is recommended for detection of TRAF4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

TRAF4 (N-16) is also recommended for detection of TRAF4 in additional species, including canine and bovine.

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: TRAF4 (h): 293T Lysate: sc-173385, SK-BR-3 cell lysate: sc-2218 or SK-BR-3 nuclear extract: sc-2134.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA





TRAF4 (N-16): sc-1921. Western blot analysis of TRAF4 expression in phorbol ester-treated A-431 nuclear extract (A), SK-BR-3 whole cell lysate (B) and SK-BR-3 nuclear extract (C).

SELECT PRODUCT CITATIONS

TRAF4 (N-16): sc-1921. Western blot analysis of TRAF4 expression in non-transfected: sc-11752 (A) and human TRAF4 transfected: sc-173385 (B) 293T whole cell lysates.

Devergne, O., et al. 1998. Role of the TRAF binding site and NFκB activation in Epstein-Barr virus latent membrane protein 1-induced cell gene expression. J. Virol. 72: 7900-7908.

- 2. Shiels, H., et al. 2000. TRAF4 seficiency leads to tracheal malformation with resulting alterations in air flow to the lungs. Am. J. Pathol. 157: 679-688.
- Izban, K.F., et al. 2000. Expression of the tumor necrosis factor receptorassociated factors (TRAFs) 1 and 2 is a characteristic feature of Hodgkin and Reed-Sternberg cells. Mod. Pathol. 13: 1324-1331.
- 4. Hatzoglou, A., et al. 2000. TNF receptor family member BCMA (B cell maturation) associates with TNF receptor-associated factor (TRAF) 1, TRAF2, and TRAF3 and activates NFκB, Elk-1, c-Jun N-terminal kinase, and p38 mitogen-activated protein kinase. J. Immunol. 165: 1322-1330.

RESEARCH USE

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

MONOS Satisfation Guaranteed Try TRAF4 (B-9): sc-390232 or TRAF4 (D-2): sc-390212, our highly recommended monoclonal aternatives to TRAF4 (N-16).