

TRAF4 (C-20): sc-1920

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 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.

REFERENCES

1. Smith, C.A., et al. 1994. The TNF receptor superfamily of cellular and viral proteins: activation, costimulation, and death. *Cell* 76: 959-962.
2. Cleveland, J.L. and Ihle, J.N. 1995. Contenders in FAS-L/TNF death signaling. *Cell* 81: 479-482.
3. Rothe, M., et al. 1995. TRAF2-mediated activation of NF κ B by TNF receptor 2 and CD40. *Science* 269: 1424-1427.
4. Regnier, C.H., et al. 1995. Presence of a new conserved domain in CART1, a novel member of the tumor necrosis factor receptor-associated protein family, which is expressed in breast carcinoma. *J. Biol. Chem.* 270: 25715-25721.

CHROMOSOMAL LOCATION

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

SOURCE

TRAF4 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of TRAF4 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-1920 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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

TRAF4 (C-20) 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).

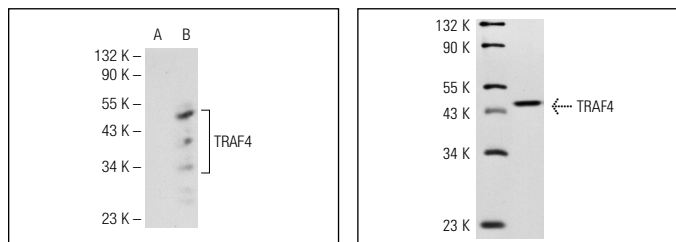
TRAF4 (C-20) is also recommended for detection of TRAF4 in additional species, including equine, canine, bovine and porcine.

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, A-431 + PMA nuclear extract: sc-2123 or HeLa whole cell lysate: sc-2200.

DATA



TRAF4 (C-20): sc-1920. Western blot analysis of TRAF4 expression in non-transfected: sc-117752 (A) and human TRAF4 transfected: sc-173385 (B) 293T whole cell lysates.

TRAF4 (C-20): sc-1920. Western blot analysis of TRAF4 expression in HeLa whole cell lysate.

SELECT PRODUCT CITATIONS

1. Xu, Y.C., et al. 2002. Involvement of TRAF4 in oxidative activation of c-Jun N-terminal kinase. *J. Biol. Chem.* 277: 28051-28057.
2. Glauner, H., et al. 2002. Intracellular localization and transcriptional regulation of tumor necrosis factor (TNF) receptor-associated factor 4 (TRAF4). *Eur. J. Biochem.* 269: 4819-4829.
3. Li, J.M., et al. 2005. Acute tumor necrosis factor α signaling via NADPH oxidase in microvascular endothelial cells: role of p47phox phosphorylation and binding to TRAF4. *Mol. Cell. Biol.* 25: 2320-2330.
4. Teng, L., et al. 2012. Divergent effects of p47(phox) phosphorylation at S303-4 or S379 on tumor necrosis factor- α signaling via TRAF4 and MAPK in endothelial cells. *Arterioscler. Thromb. Vasc. Biol.* 32: 1488-1496.

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Try **TRAF4 (B-9): sc-390232** or **TRAF4 (D-2): sc-390212**, our highly recommended monoclonal alternatives to TRAF4 (C-20).