SANTA CRUZ BIOTECHNOLOGY, INC.

TRAF3 (H-20): sc-948



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 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: TRAF3 (human) mapping to 14q32.32; Traf3 (mouse) mapping to 12 F1.

SOURCE

TRAF3 (H-20) is available as either rabbit (sc-948) or goat (sc-948-G) polyclonal affinity purified antibody raised against a peptide mapping at the N-terminus of TRAF3 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-948 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as phycoerythrin conjugate for flow cytometry, sc-948 PE, 100 tests.

APPLICATIONS

TRAF3 (H-20) is recommended for detection of TRAF3 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 μ g per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000). TRAF3 (H-20) is also recommended for detection of TRAF3 in additional species, including equine and canine.

Suitable for use as control antibody for TRAF3 siRNA (h): sc-29510, TRAF3 siRNA (m): sc-36712, TRAF3 shRNA Plasmid (h): sc-29510-SH, TRAF3 shRNA Plasmid (m): sc-36712-SH, TRAF3 shRNA (h) Lentiviral Particles: sc-29510-V and TRAF3 shRNA (m) Lentiviral Particles: sc-36712-V.

Molecular Weight of TRAF3: 65 kDa.

STORAGE

Store at 4° C, **D0 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.

DATA





TRAF3 (H-20)-G: sc-948-G. Western blot analysis of TRAF3 expression in control (A) and TRAF3 transfected (B) whole cell lysates.

TRAF3 (H-20): sc-948. Immunofluorescence staining of methanol-fixed TRAF3-transfected NIH/3T3 cells showing cytoplasmic localization **(A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human lung tissue showing cytoplasmic staining of respiratory epithelial cells **(B**).

SELECT PRODUCT CITATIONS

- 1. Devergne, O., et al. 1996. Association of TRAF1, TRAF2 and TRAF3 with an Epstein-Barr virus LMP1 domain important for B lymphocyte transformation: role in NF κ B activation. Mol. Cell. Biol. 16: 7098-7108.
- Tamassia, N., et al. 2007. The MYD88-independent pathway is not mobilized in human neutrophils stimulated via TLR4. J. Immunol. 178: 7344-7356.
- 3. Bista, P., et al. 2010. TRAF3 controls activation of the canonical and alternative NF κ B by the lymphotoxin β receptor. J. Biol. Chem. 285: 12971-12978.
- 4. Doyon, P. and Servant, M.J. 2010. Tumor necrosis factor receptor-associated factor-6 and ribosomal S6 kinase intracellular pathways link the angiotensin II AT1 receptor to the phosphorylation and activation of the IκB kinase complex in vascular smooth muscle cells. J. Biol. Chem. 285: 30708-30718.
- 5. Ganeff, C., et al. 2011. Induction of the alternative NF κ B pathway by lymphotoxin $\alpha\beta$ (LT $\alpha\beta$) relies on internalization of LT β receptor. Mol. Cell. Biol. 31: 4319-4334.
- Inomata, M., et al. 2012. Regulation of Toll-like receptor signaling by NDP52-mediated selective autophagy is normally inactivated by A20. Cell. Mol. Life Sci. 69: 963-979.
- Zhao, W., et al. 2012. E3 ubiquitin ligase tripartite motif 38 negatively regulates TLR-mediated immune responses by proteasomal degradation of TNF receptor-associated factor 6 in macrophages. J. Immunol. 188: 2567-2574.

MONOS Satisfation Guaranteed

Try **TRAF3 (G-6): sc-6933**, our highly recommended monoclonal aternative to TRAF3 (H-20). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **TRAF3 (G-6): sc-6933**.