

TANK (N-19): sc-1998

BACKGROUND

The tumor necrosis factor (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 and -RII, FAS, OX40, CD27, CD30 and CD40. Ligands for these receptors can be small, secreted proteins such as TNF, or type II integral membrane proteins, such as the CD40 ligand, CD40L. While the signal transduction mechanism of the TNF receptor superfamily is poorly understood, stimulation of cells with either TNF or soluble CD40L has been shown to induce the nuclear translocation of NF κ B. Members of the TRAF family associate with activated TNF-R and CD40 and have been implicated in this process. The discovery of a novel protein, designated TANK, has shed light on the means by which TRAF activation of NF κ B occurs. TANK is not only capable of binding to all three TRAFs, but also of synergizing with TRAF2 to activate the NF κ B signaling cascade. TANK contains a regulatory carboxy-terminal domain that maintains its inactivity in unstimulated cells. Upon its association with TRAF2, the inhibitory effect of this domain is overcome.

CHROMOSOMAL LOCATION

Genetic locus: TANK (human) mapping to 2q24.2; Tank (mouse) mapping to 2 C1.3.

SOURCE

TANK (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of TANK of mouse 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-1998 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TANK (N-19) is recommended for detection of TANK 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TANK (N-19) is also recommended for detection of TANK in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TANK siRNA (h): sc-36612, TANK siRNA (m): sc-36613, TANK shRNA Plasmid (h): sc-36612-SH, TANK shRNA Plasmid (m): sc-36613-SH, TANK shRNA (h) Lentiviral Particles: sc-36612-V and TANK shRNA (m) Lentiviral Particles: sc-36613-V.

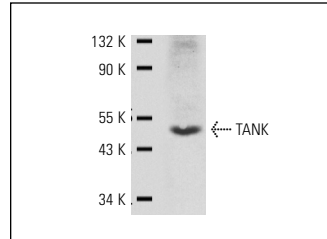
Molecular Weight of TANK: 48 kDa.

Positive Controls: Ramos cell lysate: sc-2216, HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

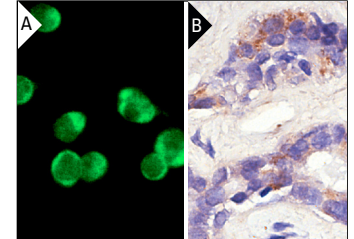
STORAGE

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

DATA



TANK (N-19): sc-1998. Western blot analysis of TANK expression in Ramos whole cell lysate.



TANK (N-19): sc-1998. Immunofluorescence staining of methanol-fixed Ramos cells (A) and immunoperoxidase staining of formalin-fixed, paraffin-embedded human lung tumor (B) showing cytoplasmic staining.

SELECT PRODUCT CITATIONS

- Lee, H.Y., et al. 2008. FOXO3a turns the tumor necrosis factor receptor signaling towards apoptosis through reciprocal regulation of c-Jun N-terminal kinase and NF κ B. *Arterioscler. Thromb. Vasc. Biol.* 28: 112-120.
- May, T., et al. 2010. Low malignant potential tumors with micropapillary features are molecularly similar to low-grade serous carcinoma of the ovary. *Gynecol. Oncol.* 117: 9-17.
- Huang, L., et al. 2015. Encephalomyocarditis virus 3C protease relieves TRAF family member-associated NF κ B activator (TANK) inhibitory effect on TRAF6-mediated NF κ B signaling through cleavage of TANK. *J. Biol. Chem.* 290: 27618-27632.

RESEARCH USE

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

PROTOCOLS

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


 MONOS
 Satisfaction
 Guaranteed

Try **TANK (D-2): sc-166643** or **TANK (A-7): sc-166642**, our highly recommended monoclonal alternatives to TANK (N-19).