

#2141 Store at -20°C

TANK Antibody

✓ 100 µl
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

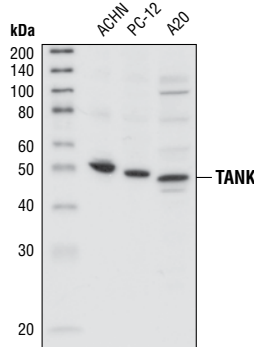
Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IP Endogenous	H, M, R, (Mk, B, Dg)	50 kDa	Rabbit**

Background: TRAFs (TNF receptor-associated factors) are a family of multifunctional adaptor proteins that bind to surface receptors and recruit additional proteins to form multiprotein signaling complexes capable of promoting cellular responses (1-3). Members of the TRAF family share a common carboxy-terminal "TRAF domain" which mediates interactions with associated proteins; many also contain amino-terminal Zinc/RING finger motifs. The first TRAFs identified, TRAF1 and TRAF2, were found by virtue of their interactions with the cytoplasmic domain of TNF-receptor 2 (TNFR2) (4). The six known TRAFs (TRAF1-6) act as adaptor proteins for a wide range of cell surface receptors and participate in the regulation of cell survival, proliferation, differentiation, and stress responses.

TRAF-associated NF-κB activator (TANK), also known as TRAF-interacting protein (I-TRAF), is a TRAF binding protein that demonstrates both stimulatory and inhibitory properties (5,6). TANK binds to the carboxy domain of the TRAF1, -2 and -3. Overexpression of TANK prevents the association of TRAF2 with TNFR2, inhibiting TNFR2 and CD40 induced NF-κB activation (6). TANK is also reported to synergize with low levels of TRAF2 to activate NF-κB (5). TANK assists in the activation of NF-κB via association and activation of TANK-binding kinase 1 (TBK1) or IKKε which promotes activation of the IKK complex (7,8). It has also been shown that TANK may synergize with TRAF2, TRAF5, and TRAF6 but not TRAF3 in SAPK activation (9). TNFα stimulation results in IKKβ-dependent phosphorylation of TANK which may provide negative feedback regulation of TANK mediated NF-κB activation (10).

Specificity/Sensitivity: TANK Antibody detects endogenous levels of total TANK protein. It does not cross react with other TRAF family members.

Source/Purification: Polyclonal antibodies are prepared by immunizing rabbits with a synthetic peptide (KLH-coupled) corresponding to residues surrounding Ser357 of human TANK. Antibodies are purified by protein A and peptide affinity chromatography.



Western blot analysis of extracts from ACHN (human), PC-12 (rat) and A20 (mouse), using TANK Antibody.

Background References:

- (1) Arch, R.H. et al. (1998) *Genes Dev.* 12, 2821–2830.
- (2) Chung, J.Y. et al. (2002) *J. Cell Sci.* 115, 679–688.
- (3) Bradley, J.R. and Pober, J.S. (2001) *Oncogene* 20, 6482–6491.
- (4) Rothe, M. et al. (1994) *Cell* 78, 681–692.
- (5) Cheng, G. and Baltimore, D. (1996) *Genes Dev.* 10, 963–973.
- (6) Rothe, M. et al. (1996) *Proc. Natl. Acad. Sci. USA* 93, 8241–8846.
- (7) Pomerantz, J.L. and Baltimore, D. (1999) *EMBO J.* 18, 6694–6704.
- (8) Chariot, A. et al. (2002) *J. Biol. Chem.* 277, 37029–37036.
- (9) Chin, A.I. et al. (1999) *Mol. Cell. Biol.* 19, 6665–6672.
- (10) Bonif, M. et al. (2006) *Biochem. J.* 394, 593–603.

Entrez-Gene ID #10010
Swiss-Prot Acc. #Q92844

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000
Immunoprecipitation 1:50

For application specific protocols please see the web page for this product at www.cellsignaling.com.

Please visit www.cellsignaling.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

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Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.