

# TANK Antibody

Catalog # ASC10443

## Specification

# TANK Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes IF <u>O92844</u> <u>NP\_004171, 10010</u> Human, Mouse, Rat Rabbit Polyclonal IgG TANK antibody can be used for the detection of TANK by Western blot at 1 - 2 μg/mL. Antibody can also be used for immunohistochemistry starting at 10 μg/mL. For immunofluorescence start at 20 μg/mL.

# TANK Antibody - Additional Information

Gene ID 10010 Other Names TANK Antibody: ITRAF, TRAF2, I-TRAF, ITRAF, TRAF family member-associated NF-kappa-B activator, TRAF-interacting protein, TRAF family member-associated NFKB activator

### Target/Specificity

TANK antibody was raised against a 14 amino acid synthetic peptide from near the carboxy terminus of human TANK.<br><br>The immunogen is located within amino acids 350 - 400 of TANK.

#### **Reconstitution & Storage**

TANK antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

#### Precautions

TANK Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **TANK Antibody - Protein Information**

Name TANK

Synonyms ITRAF, TRAF2

### Function

Adapter protein involved in I-kappa-B-kinase (IKK) regulation which constitutively binds TBK1 and IKBKE playing a role in antiviral innate immunity. Acts as a regulator of TRAF function by



maintaining them in a latent state. Blocks TRAF2 binding to LMP1 and inhibits LMP1- mediated NF-kappa-B activation. Negatively regulates NF-kappaB signaling and cell survival upon DNA damage (PubMed:<a href="http://www.uniprot.org/citations/25861989"

target="\_blank">25861989</a>). Plays a role as an adapter to assemble ZC3H12A, USP10 in a deubiquitination complex which plays a negative feedback response to attenuate NF-kappaB activation through the deubiquitination of IKBKG or TRAF6 in response to interleukin-1-beta (IL1B) stimulation or upon DNA damage (PubMed:<a href="http://www.uniprot.org/citations/25861989" target="\_blank">25861989</a>). Promotes UBP10-induced deubiquitination of TRAF6 in response to DNA damage (PubMed:<a href="http://www.uniprot.org/citations/25861989" target="\_blank">25861989</a>). Promotes UBP10-induced deubiquitination of TRAF6 in response to DNA damage (PubMed:<a href="http://www.uniprot.org/citations/25861989" target="\_blank">25861989</a>). Promotes UBP10-induced deubiquitination of TRAF6 in response to DNA damage (PubMed:<a href="http://www.uniprot.org/citations/25861989" target="\_blank">25861989</a>). May control negatively TRAF2- mediated NF-kappa-B activation signaled by CD40, TNFR1 and TNFR2.

Cellular Location Cytoplasm.

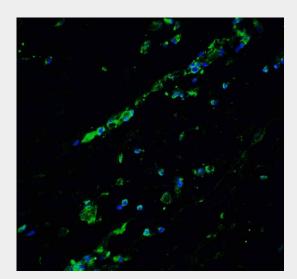
Tissue Location Ubiquitous.

## **TANK Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# **TANK Antibody - Images**



Immunofluorescence of Bcl9L in human breast tissue with Bcl9L antibody at 20 µg/ml. TANK Antibody - Background

TANK Antibody: TANK was initially identified as a novel TRAF-interacting protein that regulated



TRAF-mediated signal transduction. Specifically, ligand binding by surface receptors in the tumor necrosis factor (TNF) receptor and Toll/interleukin-1 (IL-1) receptor families lead to the formation of a TRAF/TANK complex that mediates the activation of the transcription factor NF- $\kappa$ B. This activation of NF- $\kappa$ B occurs through an association with the kinases IKK $\epsilon$  and TBK1. More recently, it was shown that these proteins can then form a complex with NEMO, a protein that regulates the activity of the I $\kappa$ B complex. This suggests that in addition to the possibility that TBK1 and IKK $\epsilon$  activate the IKKs, the association with the IKK complex may help these kinases modulate other functions, such as the transactivation potential of NF- $\kappa$ B proteins. At least two isoforms of TANK are known to exist.

## **TANK Antibody - References**

Cheng G and Baltimore D. TANK, a co-inducer with TRAF2 of TNF- and CD40L-mediated NF-κB activation. Genes Dev. 1996; 10:963-73.

Rothe M, Xiong J, Shu HB, et al. I-TRAF is a novel TRAF-interacting protein that regulates TRAF-mediated signal transduction. Proc. Natl. Acad. Sci. USA 1996; 93:8241-6.

Pomerantz JL and Baltimore D. NF-κB activation by a signaling complex containing TRAF2, TANK and TBK1, a novel IKK-related kinase. EMBO J. 1999; 18:6694-704.

Chariot A, Leonardi A, Muller J, et al. Association of the adaptor TANK with the IkB kinase (IKK) regulator NEMO connects IKK complexes with the IKKɛ and TBK1 kinases. J. Biol. Chem.2002; 277:37029-36.