

**TRAF6 Antibody**  
Catalog # ASC10191**Specification****TRAF6 Antibody - Product Information**

Application	WB, ICC, IF
Primary Accession	<a href="#">O9Y4K3</a>
Other Accession	<a href="#">NP_004611</a> , <a href="#">4759254</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	TRAF6 antibody can be used for detection of TRAF6 by Western blot at 1 µg/mL. Antibody can also be used for immunocytochemistry starting at 10 µg/mL. For immunofluorescence start at 20 µg/mL.

**TRAF6 Antibody - Additional Information**

Gene ID 7189

**Other Names**

TRAF6 Antibody: RNF85, MGC:3310, RNF85, E3 ubiquitin-protein ligase TRAF6, TNF receptor-associated factor 6

**Target/Specificity**

TRAF6;

**Reconstitution & Storage**

TRAF6 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**

TRAF6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**TRAF6 Antibody - Protein Information**

Name TRAF6

Synonyms RNF85

**Function**E3 ubiquitin ligase that, together with UBE2N and UBE2V1, mediates the synthesis of 'Lys-63'-linked-polyubiquitin chains conjugated to proteins, such as ECSIT, IKBKG, IRAK1, AKT1 and AKT2 (PubMed: <http://www.uniprot.org/citations/11057907> target="\_blank">11057907</a>, PubMed: <http://www.uniprot.org/citations/18347055>)

target="\_blank">18347055</a>, PubMed:<a href="http://www.uniprot.org/citations/19465916" target="\_blank">19465916</a>, PubMed:<a href="http://www.uniprot.org/citations/19713527" target="\_blank">19713527</a>, PubMed:<a href="http://www.uniprot.org/citations/27746020" target="\_blank">27746020</a>, PubMed:<a href="http://www.uniprot.org/citations/31620128" target="\_blank">31620128</a>). Also mediates ubiquitination of free/unanchored polyubiquitin chain that leads to MAP3K7 activation (PubMed:<a href="http://www.uniprot.org/citations/19675569" target="\_blank">19675569</a>). Leads to the activation of NF-kappa-B and JUN (PubMed:<a href="http://www.uniprot.org/citations/16378096" target="\_blank">16378096</a>, PubMed:<a href="http://www.uniprot.org/citations/17135271" target="\_blank">17135271</a>, PubMed:<a href="http://www.uniprot.org/citations/17703191" target="\_blank">17703191</a>). Seems to also play a role in dendritic cells (DCs) maturation and/or activation (By similarity). Represses c-Myb-mediated transactivation, in B-lymphocytes (PubMed:<a href="http://www.uniprot.org/citations/18093978" target="\_blank">18093978</a>, PubMed:<a href="http://www.uniprot.org/citations/18758450" target="\_blank">18758450</a>). Adapter protein that seems to play a role in signal transduction initiated via TNF receptor, IL-1 receptor and IL-17 receptor (PubMed:<a href="http://www.uniprot.org/citations/12140561" target="\_blank">12140561</a>, PubMed:<a href="http://www.uniprot.org/citations/19825828" target="\_blank">19825828</a>, PubMed:<a href="http://www.uniprot.org/citations/8837778" target="\_blank">8837778</a>). Regulates osteoclast differentiation by mediating the activation of adapter protein complex 1 (AP-1) and NF-kappa-B, in response to RANK-L stimulation (By similarity). Together with MAP3K8, mediates CD40 signals that activate ERK in B-cells and macrophages, and thus may play a role in the regulation of immunoglobulin production (By similarity). Acts as a regulator of the JNK and NF-kappa-B signaling pathways by initiating assembly of heterotypic 'Lys-63'-/'Lys-48'-linked branched ubiquitin chains that are then recognized by TAB2: TRAF6 catalyzes initial 'Lys-63'-linked-polyubiquitin chains that are then branched via 'Lys-48'-linked polyubiquitin by HUWE1 (PubMed:<a href="http://www.uniprot.org/citations/27746020" target="\_blank">27746020</a>). 'Lys-63'-/'Lys-48'-linked branched ubiquitin chains protect 'Lys-63'- linkages from CYLD deubiquitination (PubMed:<a href="http://www.uniprot.org/citations/27746020" target="\_blank">27746020</a>). Participates also in the TCR signaling by ubiquitinating LAT (PubMed:<a href="http://www.uniprot.org/citations/23514740" target="\_blank">23514740</a>, PubMed:<a href="http://www.uniprot.org/citations/25907557" target="\_blank">25907557</a>).

#### Cellular Location

Cytoplasm. Cytoplasm, cell cortex. Nucleus. Lipid droplet {ECO:0000250|UniProtKB:P70196}. Note=Found in the nuclei of some aggressive B-cell lymphoma cell lines as well as in the nuclei of both resting and activated T- and B-lymphocytes. Found in punctate nuclear body protein complexes. Ubiquitination may occur in the cytoplasm and sumoylation in the nucleus. RSAD2/viperin recruits it to the lipid droplet (By similarity).

#### Tissue Location

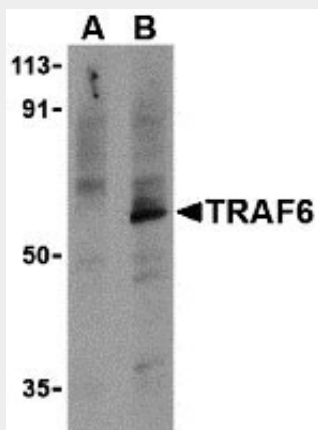
Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas

#### TRAF6 Antibody - Protocols

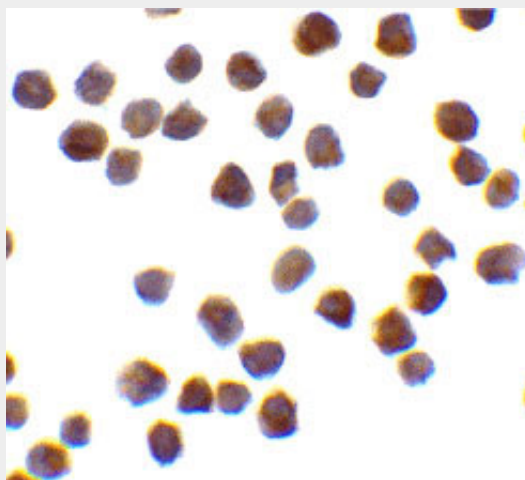
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

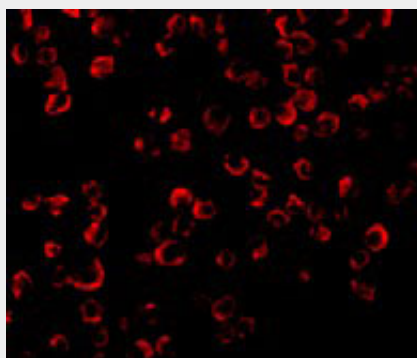
## TRAF6 Antibody - Images



Western blot analysis of TRAF6 in PC-3 cell lysates with TRAF6 antibody at 1 µg/mL in the presence (A) or absence (B) of 1 µg blocking peptide.



Immunocytochemistry of TRAF6 in K562 cells with TRAF6 antibody at 0.5 µg/mL.



Immunofluorescence of TRAF6 in K562 cells with TRAF6 antibody at 20 µg/mL.

## TRAF6 Antibody - Background

TRAF6 Antibody: Signals from the IL-1 receptor (IL-1R)/Toll-like receptor (TLR) and TNF receptor (TNFR) superfamilies are critical for regulating the function of antigen-presenting cells. Signals transduced by these molecules lead to increased expression and activation of transcription factors such as NF-κB. TNF receptor-associated factor 6 (TRAF6) is unique in that it is a signaling adapter

molecule common to both families. TRAF6 is important in cytokine production, dendritic cell (DC) maturation, and the T cell stimulatory capacity of DCs in response to TLR and CD40 ligands. It can be activated in the IL-1R/TLR signaling pathway by IL-1 receptor-associated kinase 1 (IRAK-1) or by other TLR adaptor molecules such as TRIF. Also, it has been shown that TRAF6 can interact directly with TNFR family members CD40 and RANK.

### **TRAF6 Antibody - References**

- Takeda K, Kaisho T, and Akira S. Toll-like receptors. *Annu. Rev. Immunol.* 2003; 21:335-76.
- Wu H. Assembly of post-receptor signaling complexes for the tumor necrosis factor superfamily. *Adv. Protein Chem.* 2004; 68:225-79.
- Wajant H and Scheurich P. Analogies between Drosophila and mammalian TRAF pathways. *Prog. Mol. Subcell. Biol.* 2004; 34:47-72.
- Kobayashi T, Walsh PT, Walsh MC, et al. TRAF6 is a critical factor for dendritic cell maturation and development. *Immunity* 2003; 19:353-63.