

# TRAF6 Polyclonal Antibody

Catalog # AP72903

## **Product Information**

Application	WB, IHC-P
Primary Accession	<u>Q9Y4K3</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	59573

#### **Additional Information**

Gene ID	7189
Other Names	TRAF6; RNF85; TNF receptor-associated factor 6; E3 ubiquitin-protein ligase TRAF6; Interleukin-1 signal transducer; RING finger protein 85
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

### **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: <u>11057907</u> , PubMed: <u>18347055</u> , PubMed: <u>19465916</u> , PubMed: <u>19713527</u> , PubMed: <u>27746020</u> , PubMed: <u>31620128</u> ). Also mediates ubiquitination of free/unanchored polyubiquitin chain that leads to MAP3K7 activation (PubMed: <u>19675569</u> ). Leads to the activation of NF-kappa-B and JUN (PubMed: <u>16378096</u> , PubMed: <u>17135271</u> , PubMed: <u>17703191</u> ). 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: <u>18093978</u> , PubMed: <u>18758450</u> ). Adapter protein that seems to play a role in signal transduction initiated via TNF receptor, IL-1 receptor and IL-17 receptor (PubMed: <u>12140561</u> , PubMed: <u>19825828</u> , PubMed: <u>8837778</u> ). 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: <u>27746020</u> ). 'Lys- 63'-/'Lys-48'-linked branched ubiquitin chains protect 'Lys-63'- linkages from CYLD deubiquitination (PubMed: <u>27746020</u> ). Participates also in the TCR signaling by ubiquitinating LAT (PubMed: <u>23514740</u> , PubMed: <u>25907557</u> ).
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

# Background

E3 ubiquitin ligase that, together with UBE2N and UBE2V1, mediates the synthesis of 'Lys-63'-linked-polyubiquitin chains conjugated to proteins, such as IKBKG, IRAK1, AKT1 and AKT2. Also mediates ubiquitination of free/unanchored polyubiquitin chain that leads to MAP3K7 activation. Leads to the activation of NF-kappa-B and JUN. May be essential for the formation of functional osteoclasts. Seems to also play a role in dendritic cells (DCs) maturation and/or activation. Represses c- Myb-mediated transactivation, in B-lymphocytes. Adapter protein that seems to play a role in signal transduction initiated via TNF receptor, IL-1 receptor and IL-17 receptor. Regulates osteoclast differentiation by mediating the activation of adapter protein complex 1 (AP-1) and NF-kappa-B, in response to RANK-L stimulation. 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.

#### Images



Western Blot analysis of Hela cells using TRAF6 Polyclonal Antibody diluted at 1 : 1000. Secondary antibody was diluted at 1:20000



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