ARG54687
anti-TRAF2 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes TRAF2
Tested Reactivity	Hu, Ms, Rat
Tested Application	ELISA, ICC/IF, IHC-P, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	TRAF2
Immunogen	Synthetic peptide (16 aa) within aa. 180-230 of Human TRAF2.
Conjugation	Un-conjugated
Alternate Names	TRAP3; EC 6.3.2.-; E3 ubiquitin-protein ligase TRAF2; MGC:45012; TRAP; Tumor necrosis factor type 2 receptor-associated protein 3; TNF receptor-associated factor 2

Application Instructions

Application table

Application	Dilution
ELISA	Assay-dependent
ICC/IF	20 µg/ml
IHC-P	Assay-dependent
IP	Assay-dependent
WB	0.5 - 2 µg/ml

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	Human Liver Tissue Lysate

Properties

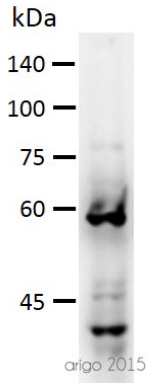
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS and 0.02% Sodium azide
Preservative	0.02% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

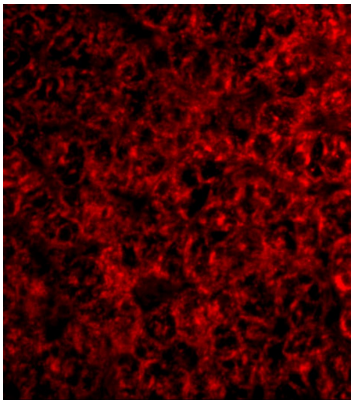
Database links	GeneID: 22030 Mouse GeneID: 7186 Human Swiss-port # P39429 Mouse Swiss-port # Q12933 Human
Gene Symbol	TRAF2
Gene Full Name	TNF receptor-associated factor 2
Background	Tumor necrosis factor (TNF) receptor associated factors (TRAFs) were initially discovered as adaptor proteins that link the TNF receptor superfamily to signaling pathways and are thus important regulators of cell death and cellular response to stress. TRAF proteins share a homology region that allows them to bind to cell receptors and other TRAF proteins, causing the activation of different signal cascades depending on the TRAFs involved. For example, TRAF2 and TRAF3 directly bind to the CD40, a NF receptor superfamily member involved in inducing B cell immunity, and are critical for NF-κB activation in mouse B lymphocytes. TRAF2 along with TRAF6 has also been shown to be required for CD40 signaling in nonhemopoietic cells. TRAF2 also interacts with the TRFR superfamily member lymphotoxin-beta receptor (LTbetaR) in association with TRAF3 and the apoptosis inhibitors cIAP1 and Smac.
Function	Regulates activation of NF-kappa-B and JNK and plays a central role in the regulation of cell survival and apoptosis. Required for normal antibody isotype switching from IgM to IgG. Has E3 ubiquitin-protein ligase activity and promotes 'Lys-63'-linked ubiquitination of target proteins, such as BIRC3, RIPK1 and TICAM1. Is an essential constituent of several E3 ubiquitin-protein ligase complexes, where it promotes the ubiquitination of target proteins by bringing them into contact with other E3 ubiquitin ligases. Regulates BIRC2 and BIRC3 protein levels by inhibiting their autoubiquitination and subsequent degradation; this does not depend on the TRAF2 RING-type zinc finger domain. Plays a role in mediating activation of NF-kappa-B by EIF2AK2/PKR. In complex with BIRC2 or BIRC3, promotes ubiquitination of IKBKE. [UniProt]
Highlight	Related products: TRAF2 antibodies; Anti-Rabbit IgG secondary antibodies; Related poster download: The NF-kappa B Pathways.pdf
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Cell Death antibody; Signaling Transduction antibody
Calculated Mw	56 kDa
PTM	Phosphorylated at several serine residues within the first 128 amino acid residues. Phosphorylated at Thr-117 in response to signaling via TNF and TNFRSF1A. Phosphorylation at Thr-117 is required for 'Lys-63'-linked polyubiquitination, but not for 'Lys-48'-linked polyubiquitination. Phosphorylation at Thr-117 is important for interaction with IKKA and IKKB, activation of IKK and subsequent activation of NF-kappa-B. Undergoes both 'Lys-48'-linked and 'Lys-63'-linked polyubiquitination. Polyubiquitinated via 'Lys-63'-linked ubiquitin in response to TNF signaling; this requires prior phosphorylation at Thr-117. 'Lys-63'-linked polyubiquitination promotes TRAF2-mediated activation of NF-kappa-B. Can be polyubiquitinated at several Lys residues via 'Lys-48'-linked ubiquitin chains in response to TNF signaling, leading to proteasomal degradation. Autoubiquitinated, leading to its subsequent proteasomal degradation. Polyubiquitinated by BIRC2 and SIAH2, leading to its subsequent proteasomal degradation. Deubiquitinated by CYLD, a protease that specifically cleaves 'Lys-63'-linked polyubiquitin chains.

Images



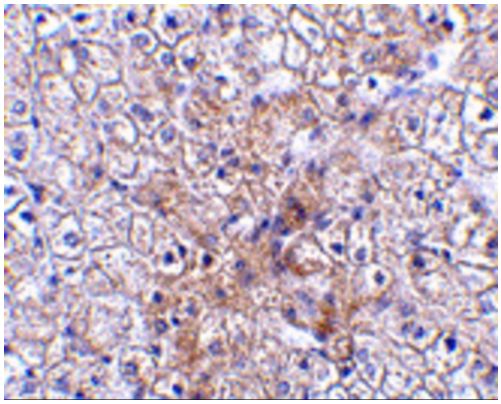
ARG54687 anti-TRAF2 antibody WB image

Western blot: 30 µg of HeLa cell lysate stained with ARG54687 anti-TRAF2 antibody at 1:500 dilution.



ARG54687 anti-TRAF2 antibody ICC/IF image

Immunofluorescence: human liver tissue stained with ARG54687 anti-TRAF2 antibody at 20 µg/ml.



ARG54687 anti-TRAF2 antibody IHC image

Immunohistochemistry: human liver tissue stained with ARG54687 anti-TRAF2 antibody at 2.5 µg/ml.