

Specification

E3 ubiquitin-protein ligase that regulates activation of NF- kappa-B and JNK and plays a central role in the regulation of cell survival and apoptosis (PubMed:10346818, PubMed:11784851, PubMed:12917689, PubMed:15383523, PubMed:18981220, PubMed:19150425, PubMed:19810754, PubMed:19918265, PubMed:19937093, PubMed:20047764, PubMed:20064526, PubMed:20385093, PubMed:20577214, PubMed:22212761). Catalyzes 'Lys-63'-linked ubiquitination of target proteins, such as BIRC3, IKBKE, MLST8, RIPK1 and TICAM1 (PubMed:23453969, PubMed:28489822). 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 (PubMed:15383523, PubMed:18981220). 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 (PubMed:11907583, PubMed:19506082). Plays a role in mediating activation of NF-kappa-B by EIF2AK2/PKR (PubMed:15121867). In complex with BIRC2 or BIRC3, promotes ubiquitination of IKBKE (PubMed:23453969). Acts as a regulator of mTORC1 and mTORC2 assembly by mediating 'Lys-63'-linked ubiquitination of MLST8, thereby inhibiting formation of the mTORC2 complex, while facilitating assembly of the mTORC1 complex (PubMed:28489822). Required for normal antibody isotype switching from IgM to IgG (By similarity).

Cellular Location

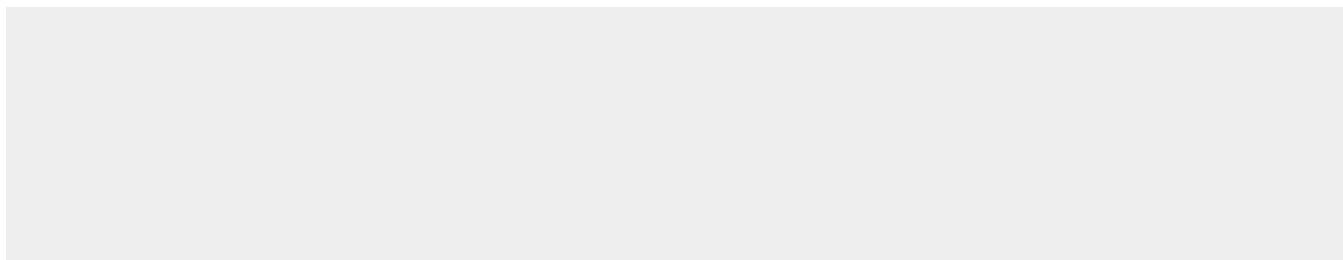
Cytoplasm

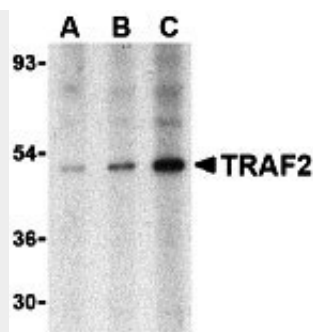
TRAF2 Antibody - Protocols

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

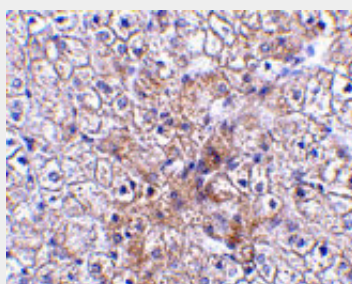
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

TRAF2 Antibody - Images

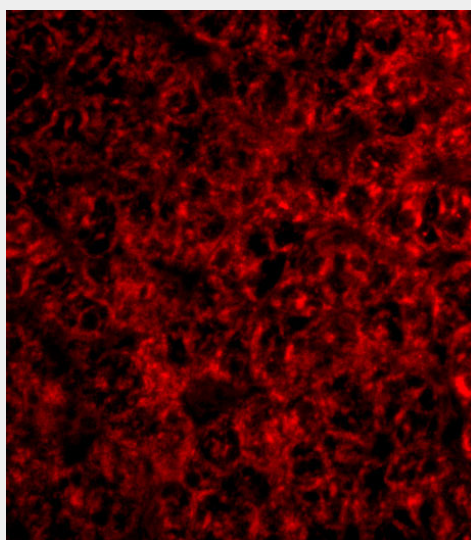




Western blot analysis of TRAF2 in human liver tissue lysate with TRAF2 antibody at (A) 0.5, (B) 1 and (C) 2 μ g/mL.



Immunohistochemistry of TRAF2 in human liver tissue with TRAF2 antibody at 2.5 μ g/mL.



Immunofluorescence of TRAF2 in human liver tissue with TRAF2 antibody at 20 μ g/mL.

TRAF2 Antibody - Background

TRAF2 Antibody: 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- κ B 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.

TRAF2 Antibody - References

Arch RH, Gedrich RW, and Thompson CB. Tumor necrosis factor receptor-associated factors (TRAFs) - a family of adaptor proteins that regulate life and death. *Genes Dev.*1998; 12:2821-30.

van Kooten C and Bancherau J. CD40-CD40 ligand. *J. Leukoc. Biol.*2000; 67:2-17.

Grech AP, Amesbury M, Chan T, et al. TRAF2 differentially regulates the canonical and noncanonical pathways of NF-kappaB activation in mature B cells. *Immunity*2004; 21:629-42.

Davies CC, Mak TW, Young LS, et al. TRAF6 is required for TRAF2-dependent CD40 signal transduction in nonhemopoietic cells. *Mol. Cell. Biol.*2005; 25:9806-19.