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TRAF2 Antibody

Catalog # ASC10379

Product Information

Application	WB, IP, E, IHC-P
Primary Accession	Q12933
Other Accession	CAI15106, 55959980
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	55859
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	TRAF2 antibody can be used for the detection of TRAF2 by Western blot at 0.5 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 10 g/mL.

Additional Information

Gene ID	7186
Other Names	TRAF2 Antibody: TRAP, TRAP3, MGC:45012, TNF receptor-associated factor 2, E3 ubiquitin-protein ligase TRAF2, TNF receptor-associated factor 2
Target/Specificity	TRAF2;
Reconstitution & Storage	TRAF2 antibody can be stored at 4℃ for three months and -20℃, 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	TRAF2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TRAF2 {ECO:0000303|PubMed:28489822, ECO:0000312|HGNC:HGNC:12032}
Function	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

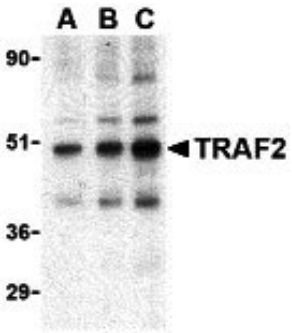
Background

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 TNF 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.

References

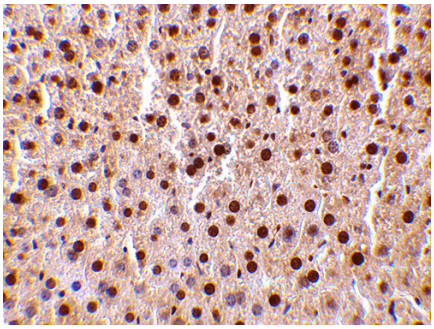
Arch RH, Gedrich RW, and Thompson CB. Tumor necrosis factor receptor-associated factors (TRAFs) - a family of adaptor proteins that regulate life and death. Genes Dev.1998; 12:2821-30.
van Kooten C and Bancherau J. CD40-CD40 ligand. J. Leukoc. Biol.2000; 67:2-17.
Grech AP, Amesbury M, Chan T, et al. TRAF2 differentially regulates the canonical and noncanonical pathways of NF-kappaB activation in mature B cells. Immunity2004; 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.

Images



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

Immunohistochemistry of TRAF2 in mouse liver tissue with TRAF2 antibody at 10 µg/mL.



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