10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TRAF2 Antibody

Mouse Monoclonal Antibody (Mab)
Catalog # AM1895B

Product Information

Application	IF, WB, E
Primary Accession	Q12933
Other Accession	NP_066961.2
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1,K
Clone Names	214CT16.3.4
Calculated MW	55859

Additional Information

Gene ID	7186
Other Names	TNF receptor-associated factor 2, 632-, E3 ubiquitin-protein ligase TRAF2, Tumor necrosis factor type 2 receptor-associated protein 3, TRAF2, TRAP3
Target/Specificity	This TRAF2 monoclonal antibody is generated from mouse immunized with TRAF2 recombinant protein.
Dilution	IF~~1:10~50 WB~~1:100~1000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
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

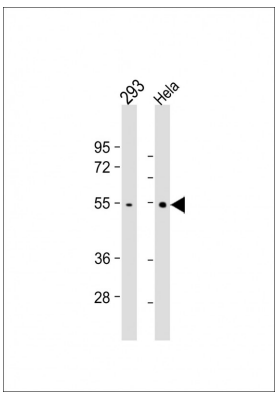
Background

The protein encoded by this gene is a member of the TNF receptor associated factor (TRAF) protein family. TRAF proteins associate with, and mediate the signal transduction from members of the TNF receptor superfamily. This protein directly interacts with TNF receptors, and forms a heterodimeric complex with TRAF1. This protein is required for TNF-alpha-mediated activation of MAPK8/JNK and NF-kappaB. The protein complex formed by this protein and TRAF1 interacts with the inhibitor-of-apoptosis proteins (IAPs), and functions as a mediator of the anti-apoptotic signals from TNF receptors. The interaction of this protein with TRADD, a TNF receptor associated apoptotic signal transducer, ensures the recruitment of IAPs for the direct inhibition of caspase activation. BIRC2/c-IAP1, an apoptosis inhibitor possessing ubiquitin ligase activity, can unbiquitinate and induce the degradation of this protein, and thus potentiate TNF-induced apoptosis. Multiple alternatively spliced transcript variants have been found for this gene, but the biological validity of only one transcript has been determined.

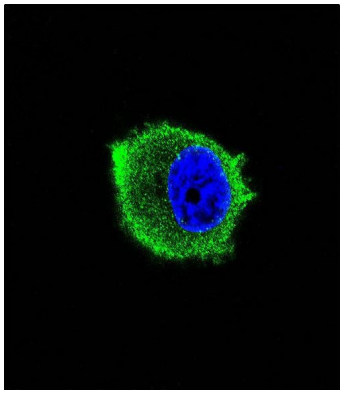
References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Song, Y.J., et al. Virus Genes 41(2):174-180(2010)
Mace, P.D., et al. J. Mol. Biol. 400(1):8-15(2010)
Alvarez, S.E., et al. Nature 465(7301):1084-1088(2010)
Zhang, W., et al. Chin. Med. Sci. J. 25(1):1-12(2010)

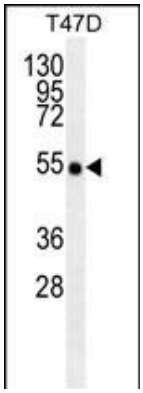
Images



All lanes : Anti- at 1:1000 dilution Lane 1: 293 whole cell lysate Lane 2: Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 56 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Confocal immunofluorescent analysis of TRAF2 Antibody (Cat#AM1895b) with MCF-7 cell followed by Alexa Fluor® 488-conjugated goat anti-mouse lgG (green). DAPI was used to stain the cell nuclear (blue).



TRAF2/MB10188 antibody (Cat. #AM1895b) western blot analysis in T47D cell line lysates (35µg/lane).This demonstrates the TRAF2/MB10188 antibody detected the TRAF2/MB10188 protein (arrow).

Citations

- MicroRNA-17 Suppresses TNF-α Signaling by Interfering with TRAF2 and cIAP2 Association in Rheumatoid Arthritis Synovial Fibroblasts.