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TRAF4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16059b

Product Information

Application	WB, E
Primary Accession	Q9BUZ4
Other Accession	Q61382, NP_004286.2
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35303
Calculated MW	53543
Antigen Region	427-455

Additional Information

Gene ID	9618
Other Names	TNF receptor-associated factor 4, Cysteine-rich domain associated with RING and Traf domains protein 1, Metastatic lymph node gene 62 protein, MLN 62, RING finger protein 83, TRAF4, CART1, MLN62, RNF83
Target/Specificity	This TRAF4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 427-455 amino acids from the C-terminal region of human TRAF4.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	TRAF4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TRAF4
Synonyms	CART1, MLN62, RNF83

Function	Adapter protein with E3 ligase activity that is involved in many diverse biological processes including cell proliferation, migration, differentiation, DNA repair, platelet activation or apoptosis (PubMed:30352854, PubMed:31076633, PubMed:32268273, PubMed:33991522). Promotes EGFR-mediated signaling by facilitating the dimerization of EGFR and downstream AKT activation thereby promoting cell proliferation (PubMed:30352854). Ubiquitinates SMURF2 through 'Lys-48'-linked ubiquitin chain leading to SMURF2 degradation through the proteasome and subsequently osteogenic differentiation (PubMed:31076633). Promotes 'Lys-63'-mediated ubiquitination of CHK1 which in turn activates cell cycle arrest and activation of DNA repair (PubMed:32357935). In addition, promotes an atypical 'Lys-29'-linked ubiquitination at the C-terminal end of IRS1 which is crucial for insulin-like growth factor (IGF) signal transduction (PubMed:33991522). Regulates activation of NF-kappa-B in response to signaling through Toll-like receptors. Required for normal skeleton development, and for normal development of the respiratory tract (By similarity). Required for activation of RPS6KB1 in response to TNF signaling. Modulates TRAF6 functions. Inhibits adipogenic differentiation by activating pyruvate kinase PKM activity and subsequently the beta-catenin signaling pathway (PubMed:32268273).
Cellular Location	Cytoplasm. Nucleus. Cytoplasm, perinuclear region. Cell junction, tight junction. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasm, cytoskeleton
Tissue Location	Expressed in epithelial cells of thymus, dendritic cells of lymph node, and in the basal cell layer of epithelia such as epidermis, nasopharynx, respiratory tract, salivary gland, and esophagus.

Background

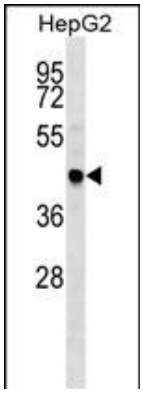
This gene encodes a member of the TNF receptor associated factor (TRAF) family. TRAF proteins are associated with, and mediate signal transduction from members of the TNF receptor superfamily. The encoded protein has been shown to interact with neurotrophin receptor, p75 (NTR/NTSR1), and negatively regulate NTR induced cell death and NF-kappa B activation. This protein has been found to bind to p47phox, a cytosolic regulatory factor included in a multi-protein complex known as NAD(P)H oxidase. This protein thus, is thought to be involved in the oxidative activation of MAPK8/JNK. Alternatively spliced transcript variants have been observed but the full-length nature of only one has been determined.

References

Li, S., et al. Mol. Cell. Biochem. 338 (1-2), 11-17 (2010) :
Davila, S., et al. Genes Immun. 11(3):232-238(2010)
Segat, L., et al. Vaccine 28(10):2201-2206(2010)
Albers, H.M., et al. Ann. Rheum. Dis. 67(11):1578-1580(2008)
Kedinger, V., et al. PLoS ONE 3 (10), E3518 (2008) :

Images

TRAF4 Antibody (C-term) (Cat. #AP16059b) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the TRAF4 antibody detected the TRAF4 protein (arrow).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.