

TRAF3 Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP51584

Product Information

Application	WB, ICC
Primary Accession	Q13114
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	64490

Additional Information

Gene ID	7187
Other Names	TNF receptor-associated factor 3, 632-, CAP-1, CD40 receptor-associated factor 1, CRAF1, CD40-binding protein, CD40BP, LMP1-associated protein 1, LAP1, TRAF3, CAP1, CRAF1
Dilution	WB~~1:1000 ICC~~N/A
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	TRAF3 (HGNC:12033)
Function	Cytoplasmic E3 ubiquitin ligase that regulates various signaling pathways, such as the NF-kappa-B, mitogen-activated protein kinase (MAPK) and interferon regulatory factor (IRF) pathways, and thus controls a lot of biological processes in both immune and non-immune cell types (PubMed: 33148796 , PubMed: 33608556). In TLR and RLR signaling pathways, acts as an E3 ubiquitin ligase promoting the synthesis of 'Lys-63'-linked polyubiquitin chains on several substrates such as ASC that lead to the activation of the type I interferon response or the inflammasome (PubMed: 25847972 , PubMed: 27980081). Following the activation of certain TLRs such as TLR4, acts as a negative NF-kappa-B regulator, possibly to avoid unregulated inflammatory response, and its degradation via 'Lys-48'-linked polyubiquitination is required for MAPK activation and production of inflammatory cytokines. Alternatively, when TLR4 orchestrates bacterial expulsion, TRAF3 undergoes 'Lys-33'- linked polyubiquitination and subsequently binds to RALGDS, mobilizing the exocyst complex to rapidly expel intracellular bacteria back for clearance (PubMed: 27438768). Also acts as a constitutive negative regulator of the alternative NF-kappa-B pathway,

which controls B-cell survival and lymphoid organ development. Required for normal antibody isotype switching from IgM to IgG. Plays a role T-cell dependent immune responses. Down-regulates proteolytic processing of NFKB2, and thereby inhibits non-canonical activation of NF-kappa-B. Promotes ubiquitination and proteasomal degradation of MAP3K14.

Cellular Location

Cytoplasm. Endosome {ECO:0000250|UniProtKB:Q60803} Mitochondrion. Note=Undergoes endocytosis together with TLR4 upon LPS signaling (By similarity). Co-localized to mitochondria with TRIM35 (PubMed:32562145) {ECO:0000250|UniProtKB:Q60803, ECO:0000269|PubMed:32562145}

Background

Regulates pathways leading to the activation of NF- kappa-B and MAP kinases, and plays a central role in the regulation of B-cell survival. Part of signaling pathways leading to the production of cytokines and interferon. Required for normal antibody isotype switching from IgM to IgG. Plays a role T-cell dependent immune responses. Plays a role in the regulation of antiviral responses. Is an essential constituent of several E3 ubiquitin-protein ligase complexes. May have E3 ubiquitin-protein ligase activity and promote 'Lys-63'-linked ubiquitination of target proteins. Inhibits activation of NF-kappa-B in response to LTBR stimulation. Inhibits TRAF2-mediated activation of NF-kappa- B. Down-regulates proteolytic processing of NFKB2, and thereby inhibits non-canonical activation of NF-kappa-B. Promotes ubiquitination and proteasomal degradation of MAP3K14.

References

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Mosialos G.,et al.Cell 80:389-399(1995).
Sato T.,et al.FEBS Lett. 358:113-118(1995).
Cheng G.,et al.Science 267:1494-1498(1995).
Li W.B.,et al.Submitted (FEB-2003) to the EMBL/GenBank/DDBJ databases.

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