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

Anti-TRAF3 Antibody

Catalog # AP51584

Product Information

Application	WB, IF/IC
Primary Accession	Q13114
Reactivity	Human, Mouse, Rat, Pig, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	64490

Additional Information

Gene ID	7187
Other Names	CAP1; CRAF1; TNF receptor-associated factor 3; CAP-1; CD40 receptor-associated factor 1; CRAF1; CD40-binding protein; CD40BP; LMP1-associated protein 1; LAP1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human TRAF3. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
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.

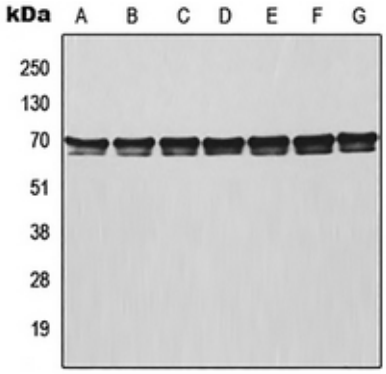
Cellular Location

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}

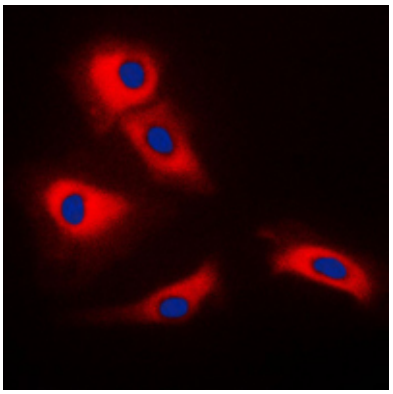
References

Hu H.M.,et al.J. Biol. Chem. 269:30069-30072(1994).
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.

Images



Western blot analysis of TRAF3 expression in MCF7 (A), HeLa (B), Raji (C), NIHC3T3 (D), mouse lung (E), rat colon (F), PC12 (G) whole cell lysates. (Predicted band size: 55; 64 kD; Observed band size: 70 kD)



Immunofluorescent analysis of TRAF3 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

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