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Anti-TRAF3IP3 Antibody

Catalog # AP51586

Product Information

Application	WB, IHC, IP, IF/IC
Primary Accession	Q9Y228
Reactivity	Human, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	63626

Additional Information

Gene ID	80342
Other Names	T3JAM; TRAF3-interacting JNK-activating modulator; TRAF3-interacting protein 3
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human TRAF3IP3. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IP~~IP (1/10 - 1/100) 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	TRAF3IP3
Synonyms	T3JAM
Function	Adapter protein that plays essential roles in both innate and adaptive immunity. Plays a crucial role in the regulation of thymocyte development (PubMed:26195727). Mechanistically, mediates TCR-stimulated activation through recruiting MAP2K1/MEK1 to the Golgi and, thereby, facilitating the interaction of MAP2K1/MEK1 with its activator BRAF (PubMed:26195727). Also plays an essential role in regulatory T-cell stability and function by recruiting the serine-threonine phosphatase catalytic subunit (PPP2CA) to the lysosome, thereby facilitating the interaction of PP2Ac with the mTORC1 component RPTOR and restricting glycolytic metabolism (PubMed:30115741). Positively regulates TLR4 signaling activity in macrophage-mediated inflammation by acting as a molecular clamp to facilitate LPS-induced translocation of TLR4 to lipid rafts (PubMed:30573680). In response to viral infection, facilitates the recruitment of TRAF3 to MAVS within mitochondria leading to IRF3 activation

and interferon production (PubMed:31390091). However, participates in the maintenance of immune homeostasis and the prevention of overzealous innate immunity by promoting 'Lys-48'- dependent ubiquitination of TBK1 (PubMed:32366851).

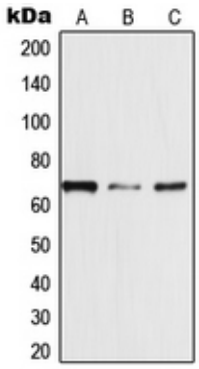
Cellular Location

Cell membrane. Golgi apparatus membrane; Single-pass type IV membrane protein. Lysosome membrane {ECO:0000250|UniProtKB:Q8C0G2}. Mitochondrion outer membrane. Note=Accumulates on the mitochondria after virus infection.

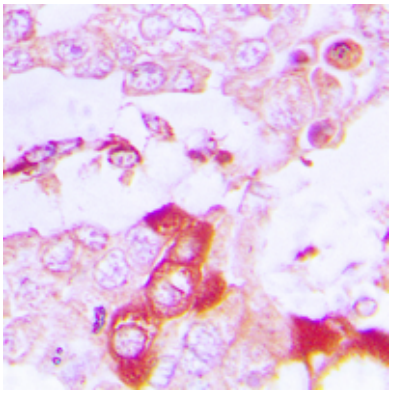
References

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Gregory S.G.,et al.Nature 441:315-321(2006).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Vasilescu J.,et al.J. Proteome Res. 6:298-305(2007).
Sjoeblom T.,et al.Science 314:268-274(2006).

Images

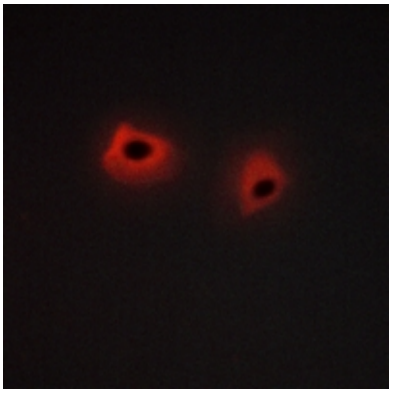


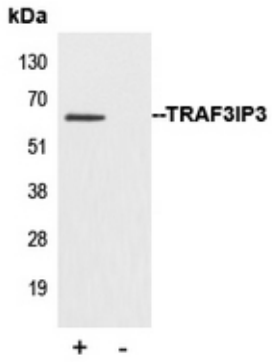
Western blot analysis of TRAF3IP3 expression in MDAMB453 (A), Jurkat (B), HeLa (C) whole cell lysates. (Predicted band size: 63 kD; Observed band size: 64 kD)



Immunohistochemical analysis of TRAF3IP3 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Immunofluorescent analysis of TRAF3IP3 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 hidified chamber. Cells were washed with PBST and incubated with a AF594-conjugated secondary antibody (red) in PBS at room temperature in the dark.





Immunoprecipitation of TRAF3IP3 from 0.5mg Mouse cortex tissue lysate, using 5ug of Anti-TRAF3IP3 Antibody and 50ul of protein G magnetic beads (+). No antibody was added to the control (-). The antibody was incubated under agitation with Protein G beads for 10min, Mouse cortex extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation. Proteins were eluted by addition of 40ul SDS loading buffer and incubated for 10min at 70°C; 10ul of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with Anti-TRAF3IP3 Antibody.

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