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TIFA Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9587A

Product Information

Application	WB, E
Primary Accession	Q96CG3
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB24815
Calculated MW	21445
Antigen Region	52-79

Additional Information

Gene ID	92610
Other Names	TRAF-interacting protein with FHA domain-containing protein A, Putative MAPK-activating protein PM14, Putative NF-kappa-B-activating protein 20, TRAF2-binding protein, TIFA, T2BP
Target/Specificity	This TIFA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 52-79 amino acids from the N-terminal region of human TIFA.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation 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	TIFA Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TIFA {ECO:0000303|PubMed:12566447, ECO:0000312|HGNC:HGNC:19075}
Function	Adapter molecule that plays a key role in the activation of pro-inflammatory NF-kappa-B signaling following detection of bacterial pathogen-associated molecular pattern metabolites (PAMPs) (PubMed:12566447,

PubMed:15492226, PubMed:26068852, PubMed:28222186, PubMed:28877472, PubMed:30111836). Promotes activation of an innate immune response by inducing the oligomerization and polyubiquitination of TRAF6, which leads to the activation of TAK1 and IKK through a proteasome-independent mechanism (PubMed:15492226, PubMed:26068852). TIFA-dependent innate immune response is triggered by ADP-D-glycero- beta-D-manno-heptose (ADP-Heptose), a potent PAMP present in all Gram- negative and some Gram-positive bacteria: ADP-Heptose is recognized by ALPK1, which phosphorylates TIFA at Thr-9, leading to TIFA homooligomerization and subsequent activation of pro-inflammatory NF-kappa-B signaling (PubMed:30111836).

Cellular Location Cytoplasm. Note=Colocalizes with lysosomal marker LAMP2 following homooligomerization and subsequent activation

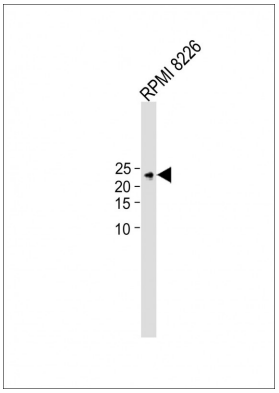
Background

Adapter protein which mediates the IRAK1 and TRAF6 interaction following IL-1 stimulation, resulting in the downstream activation of NF-kappa-B and AP-1 pathways. Induces the oligomerization and polyubiquitination of TRAF6, which leads to the activation of TAK1 and IKK through a proteasome-independent mechanism.

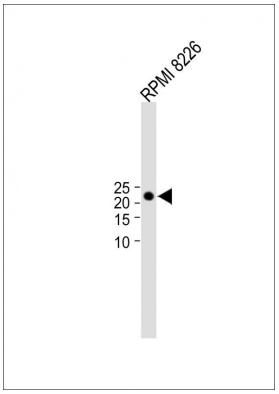
References

?Minoda, Y., et al. Biochem. Biophys. Res. Commun. 344(3):1023-1030(2006)
?Ea, C.K., et al. Proc. Natl. Acad. Sci. U.S.A. 101(43):15318-15323(2004)
?Matsuda, A., et al. Oncogene 22(21):3307-3318(2003)
?Takatsuna, H., et al. J. Biol. Chem. 278(14):12144-12150(2003)

Images



All lanes : Anti-TIFA Antibody (N-term) at 1:2000 dilution+ RPMI 8226 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 21kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-TIFA Antibody (N-term) at 1:1000 dilution Lane 1: RPMI 8226 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 21kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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