

**TIFA Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP9587a****Specification**

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**TIFA Antibody (N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O96CG3</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	52-79

**TIFA Antibody (N-term) - 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~~1:2000

**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**

TIFA Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**TIFA Antibody (N-term) - 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:[28877472](#),

PubMed:[28222186](#), 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

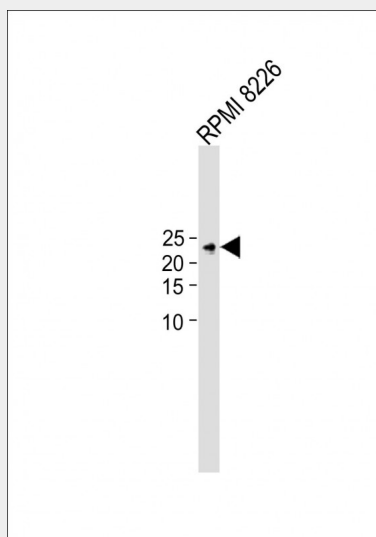
Cytoplasm. Note=Colocalizes with lysosomal marker LAMP2 following homooligomerization and subsequent activation

#### TIFA Antibody (N-term) - Protocols

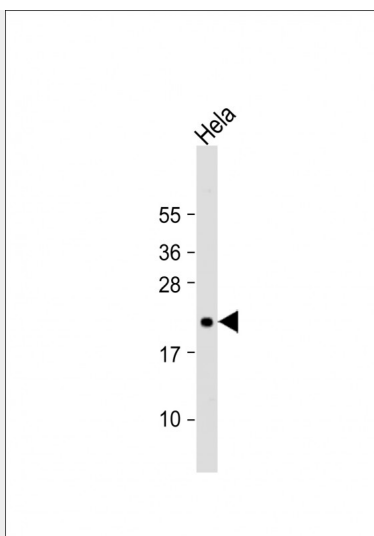
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### TIFA Antibody (N-term) - Images



All lanes : Anti-TIFA Antibody (N-term) at 1:2000 dilution+ RPMI 8226 whole cell lysate Lysates/proteins at 20  $\mu$ g 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.



Anti-TIFA Antibody (N-term) at 1:2000 dilution + HeLa whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 21 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

#### **TIFA Antibody (N-term) - 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.

#### **TIFA Antibody (N-term) - 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)