

TIFA Rabbit pAb

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Catalog # AP55237

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q96CG3
Reactivity	Mouse
Predicted	Rat, Pig, Human, Chicken, Dog, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	21445
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human TIFA
Epitope Specificity	51-150/184
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

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 {ECO:0000303 PubMed:12566447, ECO:0000312 HGNC:HGNC:19075}
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=2ug/Test
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	TIFA {ECO:0000303 PubMed:12566447, ECO:0000312 HGNC:HGNC:19075}
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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](#)).

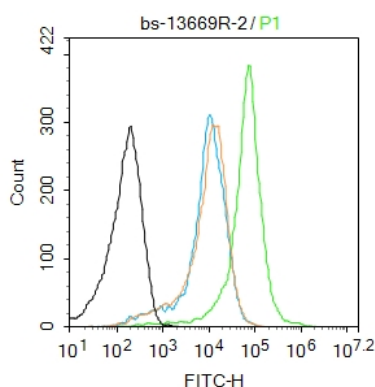
Cellular Location

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

Background

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Images



Blank control: Mouse spleen.

Primary Antibody (green line): Rabbit Anti-TIFA antibody (AP55237)

Dilution: 2 µg /10⁶ cells;

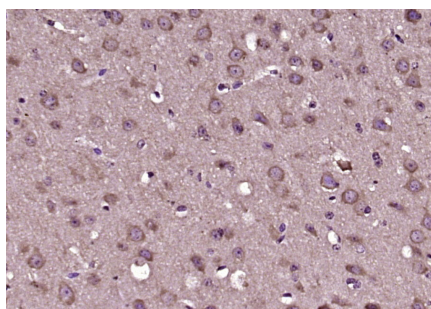
Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-AF488

Dilution: 1 µg /test.

Protocol

The cells were fixed with 70% ethanol (10min at room temperature) and then were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.



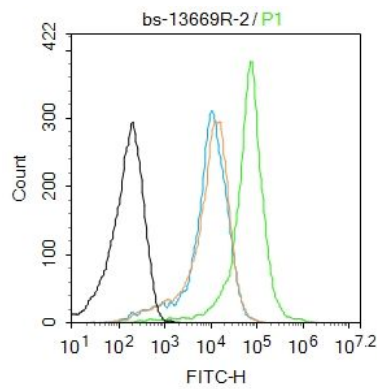
Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (TIFA) Polyclonal Antibody, Unconjugated (AP55237) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

Blank control: Mouse spleen.

Primary Antibody (green line): Rabbit Anti-TIFA antibody (AP55237)

Dilution: 2 µg /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .



Secondary Antibody : Goat anti-rabbit IgG-AF488

Dilution: 1 µg /test.

Protocol

The cells were fixed with 70% ethanol (10min at room temperature) and then were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

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