

TIFA Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP9587a**Specification**

TIFA Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q96CG3](#)**TIFA Antibody (N-term) Blocking Peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

TIFA Antibody (N-term) Blocking Peptide - 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](http://www.uniprot.org/citations/30111836)).

Cellular Location

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

TIFA Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

TIFA Antibody (N-term) Blocking Peptide - Images**TIFA Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - References

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