

TICAM1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20485a

Specification

TICAM1 Antibody (N-term) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>O8IUC6</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 76422 115-143

TICAM1 Antibody (N-term) - Additional Information

Gene ID 148022

Other Names

TIR domain-containing adapter molecule 1, TICAM-1, Proline-rich, vinculin and TIR domain-containing protein B, Putative NF-kappa-B-activating protein 502H, Toll-interleukin-1 receptor domain-containing adapter protein inducing interferon beta, MyD88-3, TIR domain-containing adapter protein inducing IFN-beta, TICAM1, PRVTIRB, TRIF

Target/Specificity

This TICAM1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 115-143 amino acids from the N-terminal region of human TICAM1.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

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

TICAM1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

TICAM1 Antibody (N-term) - Protein Information

Name TICAM1



Synonyms PRVTIRB, TRIF

Function Involved in innate immunity against invading pathogens. Adapter used by TLR3, TLR4 (through TICAM2) and TLR5 to mediate NF- kappa-B and interferon-regulatory factor (IRF) activation, and to induce apoptosis (PubMed:<u>12471095</u>, PubMed:<u>12539043</u>, PubMed:<u>14739303</u>, PubMed:<u>28747347</u>, PubMed:<u>35215908</u>). Ligand binding to these receptors results in TRIF recruitment through its TIR domain (PubMed:<u>12471095</u>, PubMed:<u>12539043</u>, PubMed:<u>14739303</u>). Distinct protein-interaction motifs allow recruitment of the effector proteins TBK1, TRAF6 and RIPK1, which in turn, lead to the activation of transcription factors IRF3 and IRF7, NF-kappa-B and FADD respectively (PubMed:<u>12471095</u>, PubMed:<u>12539043</u>, PubMed:<u>14739303</u>). Phosphorylation by TBK1 on the pLxIS motif leads to recruitment and subsequent activation of the transcription factor IRF3 to induce expression of type I interferon and exert a potent immunity against invading pathogens (PubMed:<u>25636800</u>). Component of a multi- helicase-TICAM1 complex that acts as a cytoplasmic sensor of viral double-stranded RNA (dsRNA) and plays a role in the activation of a cascade of antiviral responses including the induction of pro- inflammatory cytokines (By similarity).

Cellular Location

Cytoplasmic vesicle, autophagosome. Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q80UF7}. Mitochondrion {ECO:0000250|UniProtKB:Q80UF7}. Note=Colocalizes with UBQLN1 in the autophagosome (PubMed:21695056). Colocalizes in the cytosol with DDX1, DDX21 and DHX36. Colocalizes in the mitochondria with DDX1 and poly(I:C) RNA ligand. The multi-helicase-TICAM1 complex may translocate to the mitochondria upon poly(I:C) RNA ligand stimulation (By similarity). {ECO:0000250|UniProtKB:Q80UF7, ECO:0000269|PubMed:21695056}

Tissue Location

Ubiquitously expressed but with higher levels in liver.

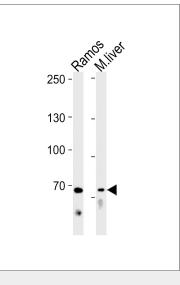
TICAM1 Antibody (N-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

TICAM1 Antibody (N-term) - Images





TICAM1 Antibody (N-term) (Cat. #AP20485a) western blot analysis in Ramos cell line and mouse liver tissue lysates (35ug/lane). This demonstrates the TICAM1 antibody detected the TICAM1 protein (arrow).

TICAM1 Antibody (N-term) - Background

Involved in innate immunity against invading pathogens. Adapter used by TLR3 and TLR4 (through TICAM2) to mediate NF-kappa-B and interferon-regulatory factor (IRF) activation, and to induce apoptosis. Ligand binding to these receptors results in TRIF recruitment through its TIR domain. Distinct protein-interaction motifs allow recruitment of the effector proteins TBK1, TRAF6 and RIPK1, which in turn, lead to the activation of transcription factors IRF3 and IRF7, NF-kappa-B and FADD respectively.

TICAM1 Antibody (N-term) - References

Bin L.-H., et al. J. Biol. Chem. 278:24526-24532(2003). Yamamoto M., et al. J. Immunol. 169:6668-6672(2002). Oshiumi H., et al. Nat. Immunol. 4:161-167(2003). Nakajima T., et al. Immunogenetics 60:727-735(2008). Matsuda A., et al. Oncogene 22:3307-3318(2003).