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TICAM1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20485a

Product Information

Application	WB, E
Primary Accession	Q8IUC6
Reactivity	Human, Mouse
Predicted	Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	76422
Antigen Region	115-143

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.

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:12471095, PubMed:12539043, PubMed:14739303, PubMed:28747347, PubMed:35215908, PubMed:31511519). Ligand binding to these receptors results in TRIF recruitment through its TIR domain (PubMed:12471095, PubMed:12539043, PubMed:14739303). 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:12471095, PubMed:12539043, PubMed:14739303). 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:25636800). 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.

Background

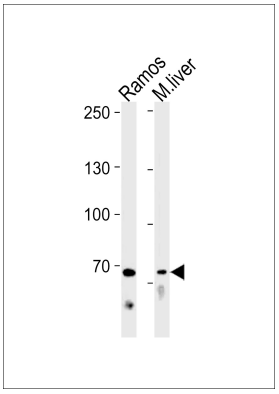
Involved in innate immunity against invading pathogens. Adapter used by TLR3 and TLR4 (through TICAM2) to mediate NF-kappa-B and interferon-regulatory factor (IRF) activation, and to induce apoptosis. Ligand binding to these receptors results in TRIF recruitment through its TIR domain. Distinct protein-interaction 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.

References

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Yamamoto M., et al. J. Immunol. 169:6668-6672(2002).
Oshiumi H., et al. Nat. Immunol. 4:161-167(2003).
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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).



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