

TICAM1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP20485a

Product Information

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

Additional Information

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| 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

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| Name | TICAM1 |
| Synonyms | PRVTIRB, TRIF |

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| 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). 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

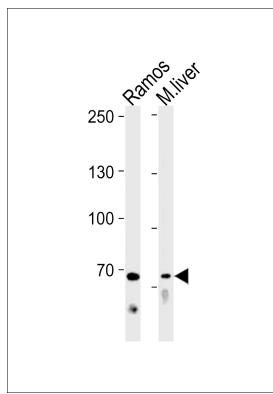
Involved in innate immunity against invading pathogens. Adapter used by TLR3 and TLR4 (through TICAM2) to mediate NF-kappa-B and interferon-regulatory factor (IRF) activation, and to induce apoptosis. Ligand binding to these receptors results in TRIF recruitment through its TIR domain. Distinct protein-interaction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

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).
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Matsuda A., et al. Oncogene 22:3307-3318(2003).

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'.