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Anti-TRIF Antibody
Catalog # ABO11206

Specification

Anti-TRIF Antibody - Product Information

Application	**WB, IHC**
Primary Accession	Q8IUC6
Host	**Rabbit**
Reactivity	**Human**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for TIR domain-containing adapter molecule 1(TICAM1) detection. Tested with WB, IHC-P, IHC-F in Human.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-TRIF Antibody - 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

Calculated MW
76422 MW KDa

Application Details
Immunohistochemistry(Frozen Section), 0.5-1 µg/ml, Human, -
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Cytoplasmic vesicle, autophagosome . Colocalizes with UBQLN1 in the autophagosome. .

Tissue Specificity
Ubiquitously expressed but with higher levels in liver. .

Protein Name
TIR domain-containing adapter molecule 1

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human TRIF(692-712aa NNHMWNQRGSQAPEDKTQEAE).

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage

At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities
Contains 1 TIR domain.

Anti-TRIF Antibody - 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). 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}

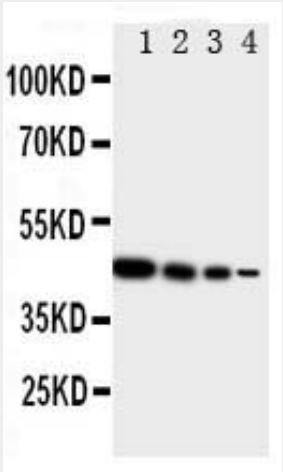
Tissue Location
Ubiquitously expressed but with higher levels in liver.

Anti-TRIF Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-TRIF Antibody - Images



Anti-TRIF antibody, ABO11206, Western blottingRecombinant Protein Detection Source: E.coli derived -recombinant Human TICAM1, 44.7KD(162aa tag+ Q468-E712)Lane 1: Recombinant Human TICAM1 Protein 10ngLane 2: Recombinant Human TICAM1 Protein 5ngLane 3: Recombinant Human TICAM1 Protein 2.5ngLane 4: Recombinant Human TICAM1 Protein 1.25ng

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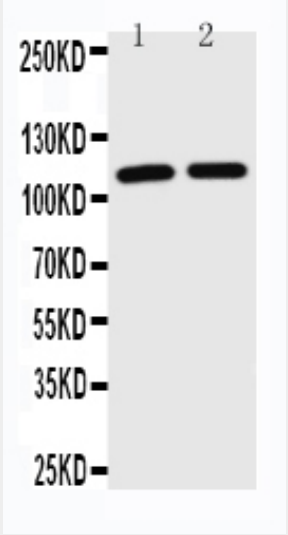
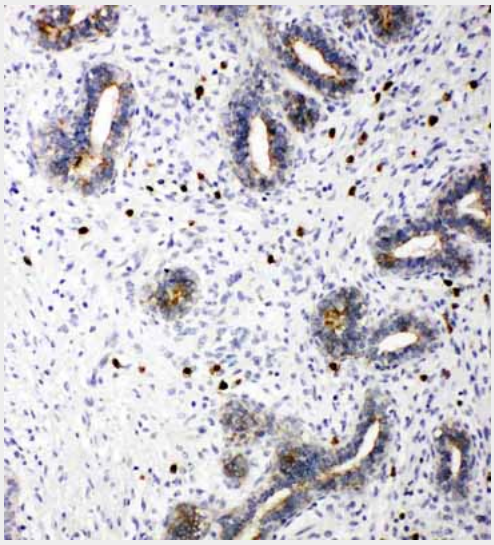


Anti-TRIF antibody, ABO11206, Western blottingLane 1: JURKAT Cell LysateLane 2: HL-60 Cell Lysate



Anti-TRIF antibody, ABO11206, IHC(P)IHC(P): Human Mammary Cancer Tissue

Anti-TRIF Antibody - Background

TICAM(TIR DOMAIN-CONTAINING ADAPTOR MOLECULE 1), also known as TICAM1 or TRIF, is an adapter in responding to activation of toll-like receptors(TLRs). It mediates the rather delayed cascade of two TLR-associated signaling cascades, where the other one is dependent upon a MyD88 adapter. By genomic sequence analysis, Oshiumi et al.(2003) mapped the TICAM1 gene to chromosome 19p13.3. By coimmunoprecipitation analysis, Oshiumi et al.(2003) showed that TICAM1 interacts specifically with TLR3, but not with other TLRs. Functional analysis showed that the association of TLR3 and TICAM1 mediates dsRNA activation of IFNB, through either NFKB, AP1, or IRF3. TICAM1 activation of NFKB was found to occur predominantly through IRAK1 rather than IRAK2. Small interfering(si)RNA blockage of TICAM1, just upstream of the TIR domain, reduced IFNB production in response to dsRNA.