

### **TRIF Polyclonal Antibody**

Catalog # AP73966

#### **Specification**

# **TRIF Polyclonal Antibody - Product Information**

Application WB
Primary Accession
Reactivity Human
Host Rabbit
Clonality Polyclonal

### **TRIF Polyclonal 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) (TIR domain-containing adapter protein inducing IFN-beta)

#### **Dilution**

WB~~WB 1:500-2000, ELISA 1:10000-20000

#### **Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

# **Storage Conditions**

-20°C

# **TRIF Polyclonal 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:<a href="http://www.uniprot.org/citations/12471095" target="\_blank">12471095</a>, PubMed:<a href="http://www.uniprot.org/citations/12539043" target="\_blank">12539043</a>, PubMed:<a href="http://www.uniprot.org/citations/14739303" target="\_blank">14739303</a>, PubMed:<a href="http://www.uniprot.org/citations/28747347" target="\_blank">28747347</a>, PubMed:<a href="http://www.uniprot.org/citations/35215908" target="\_blank">35215908</a>, Ligand binding to these receptors results in TRIF recruitment through its TIR domain (PubMed:<a href="http://www.uniprot.org/citations/12471095" target="\_blank">12471095</a>, PubMed:<a href="http://www.uniprot.org/citations/12539043" target="\_blank">12539043</a>, PubMed:<a href="http://www.uniprot.org/citations/14739303"



target="\_blank">14739303</a>). 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:<a

 $href="http://www.uniprot.org/citations/12471095" target="\_blank">12471095</a>, PubMed:<a href="http://www.uniprot.org/citations/12539043" target="_blank">12539043</a>, PubMed:<a href="http://www.uniprot.org/citations/14739303" target="_blank">14739303</a>).$ 

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:<a href="http://www.uniprot.org/citations/25636800" target="\_blank">25636800</a>). 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.

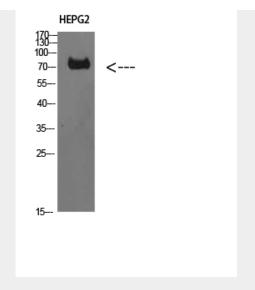
### **TRIF Polyclonal Antibody - Protocols**

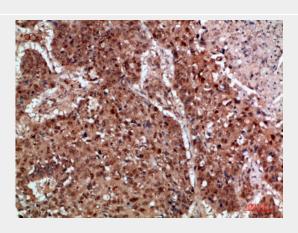
Provided below are standard protocols that you may find useful for product applications.

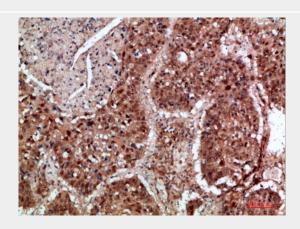
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **TRIF Polyclonal Antibody - Images**

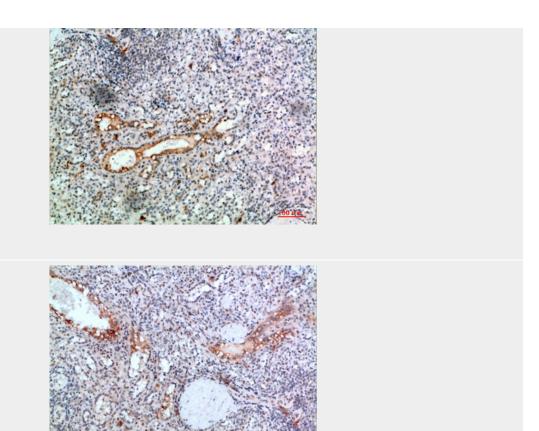












**TRIF Polyclonal Antibody - Background** 

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. 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. 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 proinflammatory cytokines (By similarity).