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TRIF Antibody
Catalog # ASC10205

Specification

TRIF Antibody - Product Information

Application	**ICC**
Primary Accession	Q8IUC6
Other Accession	NP_891549, 148022
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**TRIF antibody can be used for detection of TRIF by Western blot at 1 to 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 10 µg/mL. For immunofluorescence start at 10 µg/mL.**

TRIF Antibody - Additional Information

Gene ID **148022**

Other Names
TRIF Antibody: TRIF, IIAE6, MyD88-3, PRVTIRB, TICAM-1, TRIF, TIR domain-containing adapter molecule 1, Proline-rich, vinculin and TIR domain-containing protein B, toll-like receptor adaptor molecule 1

Target/Specificity
TRIF antibody was raised against a peptide corresponding to 14 amino acids near the C-terminus of human TRIF.

The immunogen is located within the last 50 amino acids of TRIF.

Reconstitution & Storage
TRIF antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
TRIF Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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.

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

TRIF Antibody - Images

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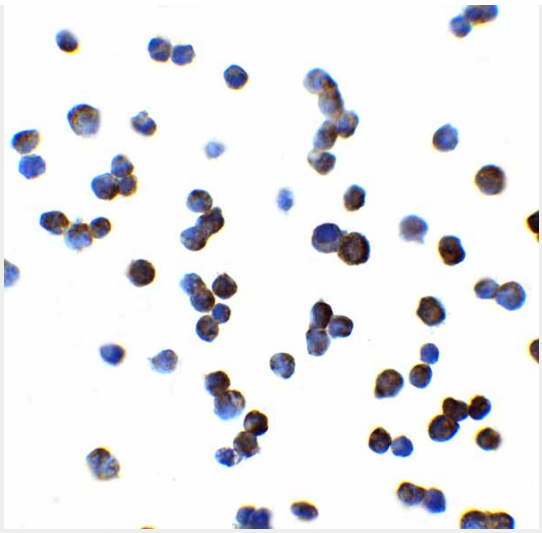

Immunocytochemistry of SLCO1B1 in HepG2 cells with SLCO1B1 antibody at 2.5 µg/ml.

TRIF Antibody - Background

TRIF Antibody: TRIF is a member of the Toll/interleukin-1 receptor (TIR) family, a group of proteins that include the Toll-like receptors (TLRs). TLRs are signaling molecules that recognize different pathogen-associated molecular patterns (PAMPs) and serve as an important link between the innate and adaptive immune responses. TRIF, along with other molecules such as TIRP, TIRAP, and MyD88, serves as an adaptor protein to several of the TLR molecules. Following activation of TLR3 and TLR4, TRIF engages the kinase TBK1 and allows its subsequent activation of the interferon regulatory factor (IRF)-3. TRIF is also involved in the activation of TNF receptor associated factor (TRAF)-6, and ultimately the activation of NF-κB.

TRIF Antibody - References

O'Neill LAJ, Fitzgerald FA, and Bowie AG. The Toll-IL-1 receptor adaptor family grows to five members. Trends in Imm. 2003; 24:286-9.
Vogel SN, Fitzgerald KA, and Fenton MJ. TLRs: differential adapter utilization by toll-like receptors mediates TLR-specific patterns of gene expression. Mol. Interv. 2003;3:466-77.
Takeda K, Kaisho T, and Akira S. Toll-like receptors. Annu. Rev. Immunol. 2003;21:335-76.
Janeway CA Jr and Medzhitov R. Innate immune recognition. Annu. Rev. Immunol. 2002;20:197-216.