

#4596 Store at -20°C

TRIF Antibody



Cell Signaling
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Applications: WB, IP	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 98	Source: Rabbit	UniProt ID: #Q8IUC6	Entrez-Gene Id: 148022
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Product Usage Information	Application Western Blotting Immunoprecipitation	Dilution 1:1000 1:50
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.	
Specificity / Sensitivity	TRIF Antibody detects endogenous levels of total human TRIF protein.	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ser219 of human TRIF/TICAM-1. Antibodies were purified by peptide affinity chromatography.	

Background

Members of the Toll-like receptor (TLR) family, named for the closely related Toll receptor in *Drosophila*, play a pivotal role in innate immune responses (1-4). TLRs recognize conserved motifs found in various pathogens and mediate defense responses (5-7). Triggering of the TLR pathway leads to the activation of NF- κ B and subsequent regulation of immune and inflammatory genes (4). The TLRs and members of the IL-1 receptor family share a conserved stretch of approximately 200 amino acids known as the Toll/Interleukin-1 receptor (TIR) domain (1). Upon activation, TLRs associate with a number of cytoplasmic adaptor proteins containing TIR domains, including myeloid differentiation factor 88 (MyD88), MyD88-adaptor-like/TIR-associated protein (MAL/TIRAP), Toll-receptor-associated activator of interferon (TRIF), and Toll-receptor-associated molecule (TRAM) (8-10). This association leads to the recruitment and activation of IRAK1 and IRAK4, which form a complex with TRAF6 to activate TAK1 and IKK (8,11-14). Activation of IKK leads to the degradation of I κ B, which normally maintains NF- κ B in an inactive state by sequestering it in the cytoplasm.

TRIF (also termed TICAM-1) is a TIR-domain adaptor protein described to activate NF- κ B, IRF3 and trigger IFN- β production (4,5). Studies using dominant negative forms of TRIF and siRNA targeting TRIF show that TRIF functions downstream of both TLR3 and TLR4 in response to dsRNA and LPS respectively (4-6). TRIF recruits TRAF6-TAK1-TAB2 to the receptor complex which leads to NF- κ B activation (7). In addition, TRIF can trigger signaling of that lead to the induction of apoptosis (8).

Background References

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Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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