

Purified anti-TICAM-2 (TRAM) Antibody

Catalog# / Size	659402 / 100 µg
Clone	9G1B30
Regulatory Status	RUO
Other Names	TIR domain-containing adapter molecule 2, TRIF-related adapter molecule (TRAM), Toll-like receptor adaptor protein 3, Toll/interleukin-1 receptor domain-containing protein
Isotype	Mouse IgG2a, κ
Description	TICAM-2, also known as TRIF-related adaptor molecule (TRAM), is a TIR domain containing protein that was found to act as an adaptor molecule during LPS-induced innate immune response. Upon infection by Gram-negative bacteria, TLR4 specifically recognizes LPS and leads to the dimerization of the cytoplasmic TIR domains. The activated TLR4 subsequently recruits the adaptor protein complex containing both TICAM-1 and TICAM-2, resulting in the activation of IFN response factors and production of pro-inflammatory cytokines. In this signaling cascade, TICAM-2 is essential for bridging the interaction between TLR4 and TICAM-1. TICAM-2 is also involved in the regulation of the IL-18 signaling pathway, acting as a sorting adaptor that recruits MYD88 from the cytosol to the membrane region upon activation of IL-1/IL-18 receptors.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Full length human TICAM-2 recombinant protein expressed in <i>E. coli</i> .
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	WB - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by Western blotting . For Western blotting, the suggested use of this reagent is 0.5 - 2.0 µg per ml. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	Daudi cells were selected as a negative control for antibody testing due to the cell line's low expression level of the mRNA encoding TICAM2 (source: Human Protein Atlas).
RRID	AB_2563252 (BioLegend Cat. No. 659402)

Antigen Details

Structure	235 amino acids encode a protein with a predicted MW of 27 kD. Contains a TIR domain responsible for mediating the physical interaction with TLR4 and TICAM-1.
Distribution	Cytoplasm, golgi apparatus, endosome, cell membrane, and endoplasmic reticulum.
Function	TICAM-2 acts as a sorting adaptor molecule that transduces TLR4 signaling to TICAM-1 and regulates MYD88-independent pathway in response to LPS stimulation.
Interaction	Interacts with TRAF6, MYD88, TLR4, IL1R1, IL1RAP, IRAK2, IRAK3, TICAM1, IRF3, and IRF7.

Cell Type	Dendritic cells
Biology Area	Cell Biology, Immunology, Innate Immunity, Neuroscience, Signal Transduction
Antigen References	<ol style="list-style-type: none"> 1. Enokizono Y, <i>et al.</i> 2013. <i>Proc. Natl. Acad. Sci. USA.</i> 110:19908. 2. Ohnishi H, <i>et al.</i> 2012. <i>PLoS One.</i> 7:e38423. 3. Wu B, <i>et al.</i> 2011. <i>Dev. Comp. Immunol.</i> 35:764. 4. Seya T, <i>et al.</i> 2005. <i>Int. J. Biochem. Cell Biol.</i> 37:524. 5. Vogel SN, <i>et al.</i> 2003. <i>Mol. Interv.</i> 3:466. 6. Oshiumi H, <i>et al.</i> 2003. <i>J. Biol. Chem.</i> 278:49751.
Gene ID	353376

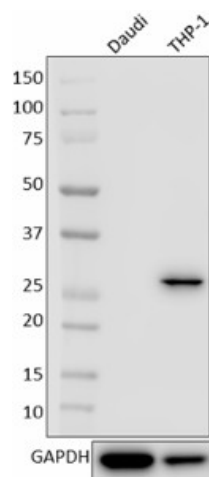
Related Protocols

[Western Blotting Protocol](#)

Other Formats

Purified anti-TICAM-2 (TRAM)

Product Data



Whole cell lysates (15 µg protein) from Daudi (negative control) and THP-1 (positive control) cells were resolved by electrophoresis (4-20% Tris-glycine gel), transferred to nitrocellulose, and probed with 1:500 (1.0 µg/mL) purified anti-TICAM2 antibody, clone 9G1B30. Proteins were visualized using chemiluminescence detection by incubating with HRP goat anti-mouse-IgG secondary antibody (Cat. No. 405306). Purified anti-GAPDH antibody (Cat. No. 631401) was used as a loading control (lower). Lane M: MW ladder.

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