

TICAM-1 (E-7): sc-514384

BACKGROUND

Toll/interleukin-1 receptor/resistance (TIR) adaptor protein (Trif, TICAM-1) can physically bind TIR domains and influence cell signaling. TICAM-1 interacts with TLR3 and mediates dsRNA activation of interferon- β , through NF κ B, AP1, or IRF3. Human TICAM-1 maps to chromosome 19p13.3.

REFERENCES

1. Yamamoto, M., et al. 2002. Cutting edge: a novel Toll/IL-1 receptor domain-containing adapter that preferentially activates the IFN- β promoter in the Toll-like receptor signaling. *J. Immunol.* 169: 6668-6672.
2. Hoebe, K., et al. 2003. Identification of Lps2 as a key transducer of MyD88-independent TIR signalling. *Nature* 424: 743-748.

CHROMOSOMAL LOCATION

Genetic locus: TICAM1 (human) mapping to 19p13.3; Ticam1 (mouse) mapping to 17 D.

SOURCE

TICAM-1 (E-7) is a mouse monoclonal antibody raised against amino acids 1-272 mapping at the N-terminus of TICAM-1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TICAM-1 (E-7) is available conjugated to agarose (sc-514384 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514384 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514384 PE), fluorescein (sc-514384 FITC), Alexa Fluor[®] 488 (sc-514384 AF488), Alexa Fluor[®] 546 (sc-514384 AF546), Alexa Fluor[®] 594 (sc-514384 AF594) or Alexa Fluor[®] 647 (sc-514384 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-514384 AF680) or Alexa Fluor[®] 790 (sc-514384 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

TICAM-1 (E-7) is recommended for detection of TICAM-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TICAM-1 siRNA (h): sc-106845, TICAM-1 siRNA (m): sc-154266, TICAM-1 shRNA Plasmid (h): sc-106845-SH, TICAM-1 shRNA Plasmid (m): sc-154266-SH, TICAM-1 shRNA (h) Lentiviral Particles: sc-106845-V and TICAM-1 shRNA (m) Lentiviral Particles: sc-154266-V.

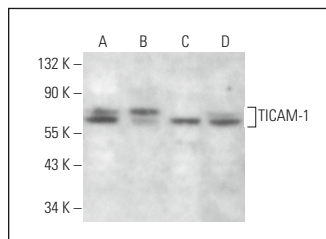
Molecular Weight of TICAM-1: 66 kDa.

Positive Controls: F9 cell lysate: sc-2245, EOC 20 whole cell lysate: sc-364187 or Ramos cell lysate: sc-2216.

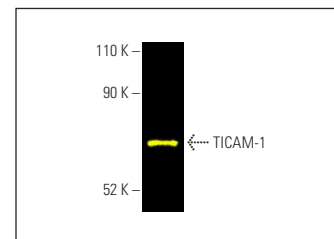
STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



TICAM-1 (E-7): sc-514384. Western blot analysis of TICAM-1 expression in F9 (A), EOC 20 (B), NIH/3T3 (C) and WEHI-231 (D) whole cell lysates.



TICAM-1 (E-7) Alexa Fluor[®] 488: sc-514384 AF488. Direct fluorescent western blot analysis of TICAM-1 expression in Ramos whole cell lysate. Blocked with UltraCruz[®] Blocking Reagent: sc-516214.

SELECT PRODUCT CITATIONS

1. Srivastava, T., et al. 2018. A TLR/Akt/FoxO3 immune tolerance-like pathway disrupts the repair capacity of oligodendrocyte progenitors. *J. Clin. Invest.* 128: 2025-2041.
2. Zheng, G., et al. 2019. Biologically active 1,25-dihydroxyvitamin D₃ protects against experimental sepsis by negatively regulating the Toll-like receptor 4/myeloid differentiation primary response gene 88/Toll-IL-1 resistance-domain-containing adapter-inducing interferon- β signaling pathway. *Int. J. Mol. Med.* 44: 1151-1160.
3. Chen, X.X., et al. 2019. Coculture with bone marrow-derived mesenchymal stem cells attenuates inflammation and apoptosis in lipopolysaccharide-stimulated alveolar epithelial cells via enhanced secretion of keratinocyte growth factor and angiopoietin-1 modulating the Toll-like receptor-4 signal pathway. *Mol. Med. Rep.* 19: 1891-1902.
4. Igase, M., et al. 2019. Anti-tumour activity of oncolytic reovirus against canine histiocytic sarcoma cells. *Vet. Comp. Oncol.* 17: 184-193.
5. Mohamed, M.E., et al. 2020. Ameliorative effect of linalool in cisplatin-induced nephrotoxicity: the role of HMGB1/TLR4/NF κ B and Nrf2/HO1 pathways. *Biomolecules* 10: 1488.
6. Schlütermann, D., et al. 2021. FIP200 controls the TBK1 activation threshold at SQSTM1/p62-positive condensates. *Sci. Rep.* 11: 13863.
7. Liu, N., et al. 2021. Recombinant annexin A2 inhibits peripheral leukocyte activation and brain infiltration after traumatic brain injury. *J. Neuroinflammation* 18: 173.
8. Lee, H.H., et al. 2023. 3',4'-dihydroxyflavone mitigates inflammatory responses by inhibiting LPS and TLR4/MD2 interaction. *Phytomedicine* 109: 154553.

RESEARCH USE

For research use only, not for use in diagnostic procedures.