

# TICAM-2 (E-2): sc-376076

## BACKGROUND

TICAM-1, also known as Toll-interleukin 1 receptor domain (TIR)-containing adaptor molecule, maps at chromosome 19p13.3. It can physically bind the TIR domain of Toll-like receptor 3 (TLR3) and activate the IFN- $\beta$  promoter. TLR proteins are signaling molecules that can recognize pathogen associated molecular patterns and may function as a link between the innate and adaptive immune responses. TICAM-1 mediates dsRNA-TLR3-dependent production of IFN- $\beta$ . This TICAM-1-dependent pathway is important for other TLR-IFN- $\beta$  pathways, which form part of the MyD88-independent cellular immune re-sponse. TICAM-2, a cytoplasmic protein, physically bridges TLR4 and TICAM-1 and functionally transmits LPS-TLR4 signaling to TICAM-1, which in turn activates IRF-3. In its structural features, TICAM-2 resembles Mal/TIRAP, an adaptor that links TLR2/4 and MyD88.

## CHROMOSOMAL LOCATION

Genetic locus: TICAM2 (human) mapping to 5q22.3; Ticam2 (mouse) mapping to 18 C.

## SOURCE

TICAM-2 (E-2) is a mouse monoclonal antibody raised against amino acids 142-226 mapping near the C-terminus of TICAM-2 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TICAM-2 (E-2) is available conjugated to agarose (sc-376076 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376076 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376076 PE), fluorescein (sc-376076 FITC), Alexa Fluor® 488 (sc-376076 AF488), Alexa Fluor® 546 (sc-376076 AF546), Alexa Fluor® 594 (sc-376076 AF594) or Alexa Fluor® 647 (sc-376076 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376076 AF680) or Alexa Fluor® 790 (sc-376076 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

TICAM-2 (E-2) is recommended for detection of TICAM-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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-2 siRNA (h): sc-44747, TICAM-2 siRNA (m): sc-44748, TICAM-2 shRNA Plasmid (h): sc-44747-SH, TICAM-2 shRNA Plasmid (m): sc-44748-SH, TICAM-2 shRNA (h) Lentiviral Particles: sc-44747-V and TICAM-2 shRNA (m) Lentiviral Particles: sc-44748-V.

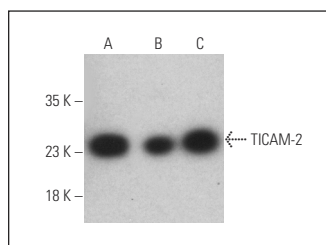
Molecular Weight of TICAM-2: 22 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214, U-937 + PMA cell lysate: sc-2296 or PC-3 cell lysate: sc-2220.

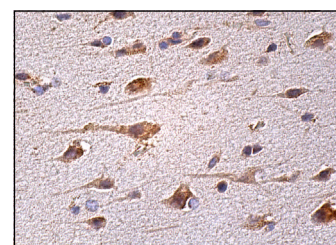
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG $\kappa$  BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



TICAM-2 (E-2) HRP: sc-376076 HRP. Direct western blot analysis of TICAM-2 expression in PC-3 (A), KNRK (B) and U-937 + PMA (C) whole cell lysates.



TICAM-2 (E-2): sc-376076. Immunoperoxidase staining of formalin fixed, paraffin-embedded human brain tissue showing cytoplasmic staining of neuronal and glial cells.

## SELECT PRODUCT CITATIONS

- Chen, X.X., et al. 2017. Paralemm-3 contributes to lipopolysaccharide-induced inflammatory response and is involved in lipopolysaccharide-Toll-like receptor-4 signaling in alveolar macrophages. *Int. J. Mol. Med.* 40: 1921-1931.
- Galoian, K., et al. 2018. Toll like receptors TLR1/2, TLR6 and MUC5B as binding interaction partners with cytotstatic proline rich polypeptide 1 in human chondrosarcoma. *Int. J. Oncol.* 52: 139-154.
- Siokas, I., et al. 2021. Immunoprecipitation strategies to isolate RIPK1/ RIPK3 complexes in mouse macrophages. *Curr. Protoc.* 1: e156.
- Magri, Z., et al. 2024. CD14 is a decision-maker between Fas-mediated death and inflammation. *Cell Rep.* 43: 114685.

## STORAGE

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

## RESEARCH USE

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

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