

# TRAF5 (E-4): sc-74502



The Power to Question

## BACKGROUND

TRAF5 is a member of the TNF receptor-associated factor (TRAF) protein family. TRAF proteins are associated with, and mediate signal transduction from, members of the TNF receptor superfamily. TRAF5 is one of the components of a complex associated with the CD40 cytoplasmic domain, which mediates TNF-induced NF $\kappa$ B activation and protection from cell death. TRAF5 influences signaling events by other receptors including CD27, CD30 and lymphotoxin- $\beta$  receptor. TRAF5 plays a role in osteoclastogenesis. Two alternatively spliced transcript variants encoding the same protein have been reported. The tumor necrosis factor (TNF) receptor superfamily is composed of several type I integral membrane glycoproteins that exhibit homology in their cysteine-rich extracellular domains.

## CHROMOSOMAL LOCATION

Genetic locus: TRAF5 (human) mapping to 1q32.2; Traf5 (mouse) mapping to 1 H6.

## SOURCE

TRAF5 (E-4) is a mouse monoclonal antibody raised against amino acids 1-257 of TRAF5 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG $_1$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TRAF5 (E-4) is available conjugated to agarose (sc-74502 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-74502 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-74502 PE), fluorescein (sc-74502 FITC), Alexa Fluor<sup>®</sup> 488 (sc-74502 AF488), Alexa Fluor<sup>®</sup> 546 (sc-74502 AF546), Alexa Fluor<sup>®</sup> 594 (sc-74502 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-74502 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-74502 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-74502 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

TRAF5 (E-4) is recommended for detection of TRAF5 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TRAF5 siRNA (h): sc-36715, TRAF5 siRNA (m): sc-36716, TRAF5 shRNA Plasmid (h): sc-36715-SH, TRAF5 shRNA Plasmid (m): sc-36716-SH, TRAF5 shRNA (h) Lentiviral Particles: sc-36715-V and TRAF5 shRNA (m) Lentiviral Particles: sc-36716-V.

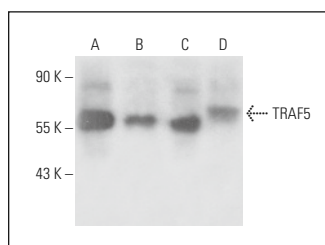
Molecular Weight of TRAF5: 55 kDa.

Positive Controls: TRAF5 (m): 293T Lysate: sc-124243, CCRF-HSB-2 cell lysate: sc-2265 or HeLa whole cell lysate: sc-2200.

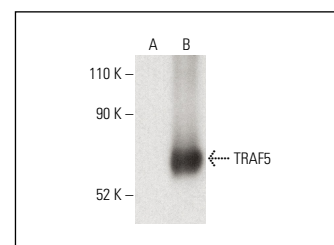
## RECOMMENDED SUPPORT REAGENTS

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<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> 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<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

## DATA



TRAF5 (E-4): sc-74502. Western blot analysis of TRAF5 expression in CCRF-HSB-2 (A), HeLa (B), Jurkat (C) and CCTL-2 (D) whole cell lysates.



TRAF5 (E-4): sc-74502. Western blot analysis of TRAF5 expression in non-transfected: sc-117752 (A) and mouse TRAF5 transfected: sc-124243 (B) whole cell lysates. Detection reagent used: m-IgG $_1$  BP-HRP: sc-525408.

## SELECT PRODUCT CITATIONS

- Pobezinskaya, Y.L., et al. 2008. The function of TRADD in signaling through tumor necrosis factor receptor 1 and TRIF-dependent Toll-like receptors. *Nat. Immunol.* 9: 1047-1054.
- Zhu, W., et al. 2019. TRAF3IP3 mediates the recruitment of TRAF3 to MAVS for antiviral innate immunity. *EMBO J.* 38: e102075.
- Wang, Q., et al. 2020. ARC is a critical protector against inflammatory bowel disease (IBD) and IBD-associated colorectal tumorigenesis. *Cancer Res.* 80: 4158-4171.
- McGowan, J., et al. 2020. 14-3-3 $\zeta$ -TRAF5 axis governs interleukin-17A signaling. *Proc. Natl. Acad. Sci. USA* 117: 25008-25017.
- Zhang, R., et al. 2022. The endoplasmic reticulum ATP13A1 is essential for MAVS-mediated antiviral innate immunity. *Adv. Sci.* 9: e2203831.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.