

TACI (C-9): sc-365253

BACKGROUND

The NFAT (nuclear factor of activated T cells) family of transcription factors regulates cytokine expression in T cells through *cis*-acting elements located in the promoters of the cytokine genes. The NFAT family consists of the cytoplasmic NFAT (NFATc), transcription factors NFATc1, NFATc2, NFATc3 and NFATc4, and nuclear NFAT (NFATn). Each of these transcription factors plays a role in T cell activation. CAML (calcium-signal modulating cyclophilin ligand) has been identified as an activator of NFAT and NF-IL2A when overexpressed in Jurkat cells. CAML has also been shown to activate calcineurin by causing calcium influx. TACI (transmembrane activator and CAML-interactor), a member of the TNF receptor superfamily, was identified based on its capacity to bind to CAML and has been shown to induce activation of NFAT in the presence of CAML.

CHROMOSOMAL LOCATION

Genetic locus: TNFRSF13B (human) mapping to 17p11.2; Tnfrsf13b (mouse) mapping to 11 B2.

SOURCE

TACI (C-9) is a mouse monoclonal antibody raised against amino acids 43-293 mapping at the C-terminus of TACI of human origin.

PRODUCT

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

TACI (C-9) is available conjugated to agarose (sc-365253 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365253 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365253 PE), fluorescein (sc-365253 FITC), Alexa Fluor® 488 (sc-365253 AF488), Alexa Fluor® 546 (sc-365253 AF546), Alexa Fluor® 594 (sc-365253 AF594) or Alexa Fluor® 647 (sc-365253 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365253 AF680) or Alexa Fluor® 790 (sc-365253 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

TACI (C-9) is recommended for detection of TACI of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 TACI siRNA (h): sc-40243, TACI siRNA (m): sc-40244, TACI shRNA Plasmid (h): sc-40243-SH, TACI shRNA Plasmid (m): sc-40244-SH, TACI shRNA (h) Lentiviral Particles: sc-40243-V and TACI shRNA (m) Lentiviral Particles: sc-40244-V.

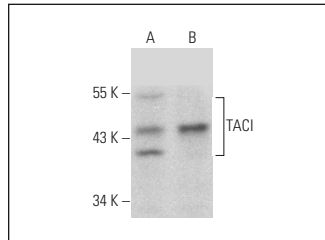
Molecular Weight of TACI: 45 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, WEHI-231 whole cell lysate: sc-2213 or RBL-1 whole cell lysate: sc-364790.

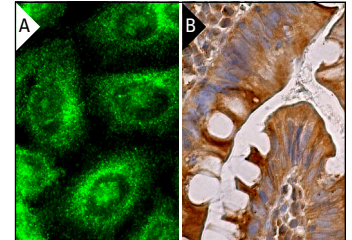
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BPHRP: sc-516102 or m-IgGκ BPHRP (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-IgGκ BPFITC: sc-516140 or m-IgGκ BPE: 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-IgGκ BPHRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



TACI (C-9): sc-365253. Western blot analysis of TACI expression in WEHI-231 (A) and RBL-1 (B) whole cell lysates.



TACI (C-9): sc-365253. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of glandular cells (B).

SELECT PRODUCT CITATIONS

1. Suso, J.P., et al. 2018. Profile of BAFF and its receptors' expression in lupus nephritis is associated with pathological classes. *Lupus* 27: 708-715.
2. Warakomska, M., et al. 2021. The effects of BAFF and APRIL signaling on non-small cell lung cancer cell proliferation and invasiveness. *Oncol. Lett.* 22: 728.
3. Forero-Delgado, J., et al. 2022. B-cell activating factor (BAFF) and its receptors' expression in pediatric nephrotic syndrome is associated with worse prognosis. *PLoS ONE* 17: e0277800.

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 for detailed protocols and support products.