SANTA CRUZ BIOTECHNOLOGY, INC.

TRB-2 (F-5): sc-376776

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

TRB-2 (Tribbles homolog 2), also known as TRIB2, C5FW or GS3955, is a cytoplasmic pro-apoptotic protein that belongs to the Tribbles subfamily of the serine/threonine protein kinase family. Members of the Tribbles subfamily, namely TRB-1, TRB-2 and TRB-3, contain a protein kinase-like or TRB domain that lacks the active site lysine and does not appear to display kinase activity. TRB proteins are induced by mitogens and interact with and are stabilized by MAPKKs. TRB proteins play an important function in the MAP kinase pathway, as is demonstrated by the inhibition of MAPK signaling in response to both over and underexpression of TRB proteins. TRB-1 is widely expressed with highest levels found in bone marrow, pancreas, skeletal muscle, peripheral blood leukocytes and thyroid gland; TRB-2 is predominantly expressed in peripheral blood leukocytes; and TRB-3 is found at highest levels in pancreas, bone marrow and peripheral blood leukocytes.

REFERENCES

1. Wilkin, F., et al. 1997. Characterization of a phosphoprotein whose mRNA is regulated by the mitogenic pathways in dog thyroid cells. Eur. J. Biochem. 248: 660-668.
2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 609462. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
3. Wu, M., et al. 2003. SINK is a p65-interacting negative regulator of NFκB-dependent transcription. J. Biol. Chem. 278: 27072-27079.

CHROMOSOMAL LOCATION

Genetic locus: TRIB2 (human) mapping to 2p24.3; Trib2 (mouse) mapping to 12 A1.1.

SOURCE

TRB-2 (F-5) is a mouse monoclonal antibody raised against amino acids 11-63 mapping near the N-terminus of TRB-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TRB-2 (F-5) is available conjugated to agarose (sc-376776 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-376776 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376776 PE), fluorescein (sc-376776 FITC), Alexa Fluor® 488 (sc-376776 AF488), Alexa Fluor® 546 (sc-376776 AF546), Alexa Fluor® 594 (sc-376776 AF594) or Alexa Fluor® 647 (sc-376776 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376776 AF680) or Alexa Fluor® 790 (sc-376776 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

TRB-2 (F-5) is recommended for detection of TRB-2 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TRB-2 (F-5) is also recommended for detection of TRB-2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TRB-2 siRNA (h): sc-94644, TRB-2 siRNA (m): sc-154621, TRB-2 shRNA Plasmid (h): sc-94644-SH, TRB-2 shRNA Plasmid (m): sc-154621-SH, TRB-2 shRNA (h) Lentiviral Particles: sc-94644-V and TRB-2 shRNA (m) Lentiviral Particles: sc-154621-V.

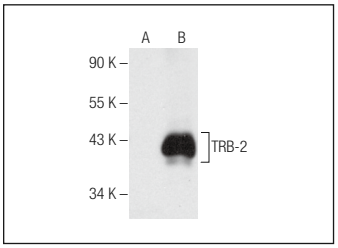
Molecular Weight of TRB-2: 37 kDa.

Positive Controls: TRB-2 (m2): 293T Lysate: sc-124270 or WEHI-3 cell lysate: sc-3815.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



TRB-2 (F-5): sc-376776. Western blot analysis of TRB-2 expression in non-transfected: sc-117752 (**A**) and mouse TRB-2 transfected: sc-124270 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Ikram, M., et al. 2021. Cycloastragenol, a triterpenoid saponin, regulates oxidative stress, neurotrophic dysfunctions, neuroinflammation and apoptotic cell death in neurodegenerative conditions. Cells 10: 2719.

RESEARCH USE

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