SANTA CRUZ BIOTECHNOLOGY, INC.

TRIM8 (B-3): sc-398878

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The tripartite motif (TRIM) family of proteins are characterized by a conserved TRIM domain that includes a coiled-coil region, a B-box type zinc finger, one RING finger and three zinc-binding domains. TRIM8 (tripartite motif containing 8), also known as GERP (glioblastoma-expressed RING finger protein) or RNF27 (RING finger protein 27), is a 551 amino acid protein that is thought to function as an E3 ubiquitin-protein ligase that promotes SOCS-1 proteasomal degradation. As a widely expressed homodimer, TRIM8 localizes to nuclear bodies and contains two B box-type zinc fingers and one RING-type zinc finger. TRIM8 is expressed in lung, heart, brain and skeletal muscle, with low levels detected in intestine, placenta, leukocytes and liver. The gene encoding TRIM8 maps to human chromosome 10q24.32.

REFERENCES

1. Vincent, S.R., et al. 2000. A novel RING finger-B box-coiled-coil protein, GERP. Biochem. Biophys. Res. Commun. 279: 482-486.
2. Reymond, A., et al. 2001. The tripartite motif family identifies cell compartments. EMBO J. 20: 2140-2151.
3. Toniato, E., et al. 2002. TRIM8/GERP RING finger protein interacts with SOCS-1. J. Biol. Chem. 277: 37315-37322.
4. Toniato, E., et al. 2004. Genomic organization and cytokine-mediated inducibility of the human TRIM-8/Gerp gene. Int. J. Immunopathol. Pharmacol. 17: 71-76.

CHROMOSOMAL LOCATION

Genetic locus: TRIM8 (human) mapping to 10q24.32; Trim8 (mouse) mapping to 19 C3.

SOURCE

TRIM8 (B-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 525-551 at the C-terminus of TRIM8 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.

TRIM8 (B-3) is available conjugated to agarose (sc-398878 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-398878 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398878 PE), fluorescein (sc-398878 FITC), Alexa Fluor® 488 (sc-398878 AF488), Alexa Fluor® 546 (sc-398878 AF546), Alexa Fluor® 594 (sc-398878 AF594) or Alexa Fluor® 647 (sc-398878 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398878 AF680) or Alexa Fluor® 790 (sc-398878 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398878 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

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

APPLICATIONS

TRIM8 (B-3) is recommended for detection of TRIM8 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).

Suitable for use as control antibody for TRIM8 siRNA (h): sc-90801, TRIM8 siRNA (m): sc-154672, TRIM8 shRNA Plasmid (h): sc-90801-SH, TRIM8 shRNA Plasmid (m): sc-154672-SH, TRIM8 shRNA (h) Lentiviral Particles: sc-90801-V and TRIM8 shRNA (m) Lentiviral Particles: sc-154672-V.

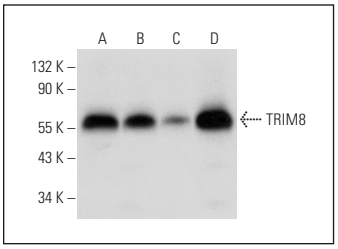
Molecular Weight of TRIM8: 61 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Hep G2 cell lysate: sc-2227 or Jurkat whole cell lysate: sc-2204.

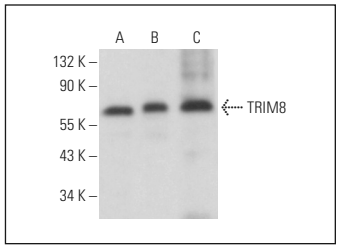
RECOMMENDED SUPPORT REAGENTS

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



TRIM8 (B-3): sc-398878. Western blot analysis of TRIM8 expression in Hep G2 (**A**), HeLa (**B**), RT-4 (**C**) and Jurkat (**D**) whole cell lysates.



TRIM8 (B-3): sc-398878. Western blot analysis of TRIM8 expression in A549 (**A**), L6 (**B**) and KNRK (**C**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Maarifi, G., et al. 2019. TRIM8 is required for virus-induced IFN response in human plasmacytoid dendritic cells. Sci. Adv. 5: eaax3511.
2. Seong, B.K.A., et al. 2021. TRIM8 modulates the EWS/FLI oncoprotein to promote survival in Ewing sarcoma. Cancer Cell. E-published.

STORAGE

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