SANTA CRUZ BIOTECHNOLOGY, INC.

TRIM (Y-18): sc-15485

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

TRIM (T-cell receptor interacting molecule) is a novel transmembrane adaptor protein which associates and comodulates with the TCR-CD3ζ complex in human T lymphocytes and T cell lines. TRIM is a type III transmembrane protein that contains an 8-amino acid extracellular domain and an intracellular domain that contains 4 potential phosphorylation sites and 8 tyrosine residues, at least 3 of which may be involved in SH2-mediated interactions with other signaling proteins. The human TRIM gene maps to chromosome 3q13.13, which is a susceptibility locus for rheumatoid arthritis and is in proximity to the CD28, CD86, and CD80 genes, all of which encode T-cell costimulatory molecules. TRIM is expressed in T-cells and natural killer cells, but not in B cells or monocytic cells. In T-cells, TRIM localizes to the cell membrane and associates with CD3ζ and CD3ε.

REFERENCES

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3. Hubener, C., Mincheva, A., Lichter, P., Schraven, B. and Bruyns, E. 2000. Genomic organization and chromosomal localization of the human gene encoding the T-cell receptor-interacting molecule (TRIM). Immunogenetics 51: 154-158.
4. Huynh, T., Wurch, A., Bruyns, E., Korinek, V., Schraven, B. and Eichmann, K. 2001. Developmentally regulated expression of the transmembrane adaptor protein trim in fetal and adult T cells. Scand. J. Immunol. 54: 146-154.
5. Kirchgessner, H., Dietrich, J., Scherer, J., Isomaki, P., Korinek, V., Hilgert, I., Bruyns, E., Leo, A., Cope, A.P. and Schraven, B. 2001. The transmembrane adaptor protein TRIM regulates T cell receptor (TCR) expression and TCR-mediated signaling via an association with the TCR ζ chain. J. Exp. Med. 193: 1269-1284.

CHROMOSOMAL LOCATION

Genetic locus: TRAT1 (human) mapping to 3q13.13.

SOURCE

TRIM (Y-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TRIM of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-15485 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TRIM (Y-18) is recommended for detection of TRIM of human origin by Western Blotting (starting dilution 1:200, 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 TRIM siRNA (h): sc-106637, TRIM shRNA Plasmid (h): sc-106637-SH and TRIM shRNA (h) Lentiviral Particles: sc-106637-V.

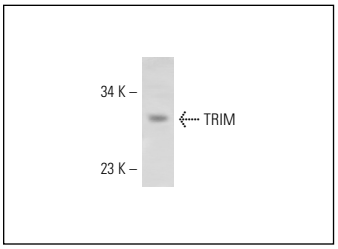
Molecular Weight of TRIM: 29 kDa.

Positive Controls: human PBL whole cell lysate.

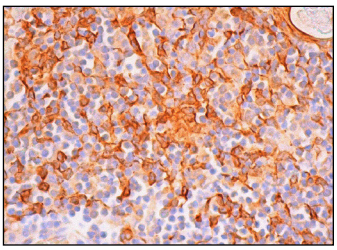
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



TRIM (Y-18): sc-15485. Western blot analysis of TRIM expression in human PBL whole cell lysate.



TRIM (Y-18): sc-15485. Immunoperoxidase staining of formalin fixed, paraffin-embedded human fetal thymus tissue showing membrane and cytoplasmic staining of thymic medullary epithelial cells.

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.