

TRIM (TRIM-04): sc-51711

BACKGROUND

TRIM (T cell receptor interacting molecule) is a novel transmembrane adaptor protein which associates and comodulates with the TCR-CD3 ζ complex in human T lymphocytes and T cell lines. TRIM is a type III transmembrane protein that contains an eight amino acid extracellular domain and an intracellular domain that contains four potential phosphorylation sites and eight tyrosine residues, at least three 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 CD3 ζ and CD3 ϵ .

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.
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5. Kirchgessner, H., Dietrich, J., Scherer, J., Isomäki, 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 (TRIM-04) is a mouse monoclonal antibody raised against amino acids 29-186 of TRIM of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

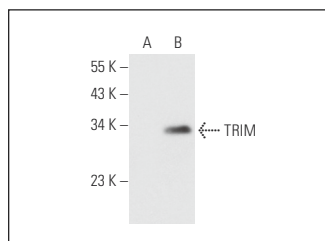
TRIM (TRIM-04) is recommended for detection of TRIM of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and flow cytometry (1 μ g per 1 x 10⁶ cells).

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: TRIM (h): 293T Lysate: sc-114237.

DATA



TRIM (TRIM-04): sc-51711. Western blot analysis of TRIM expression in non-transfected: sc-117752 (A) and human TRIM transfected: sc-114237 (B) 293T whole cell lysates.

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.