

TRIM5 (N-15): sc-48319

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, which has a molecular mass of 29 kDa, 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, 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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2. Kersh, G.J., Kersh, E.N., Fremont, D.H. and Allen, P.M. 1998. High- and low-potency ligands with similar affinities for the TCR: the importance of kinetics in TCR signaling. *Immunity* 9: 817-826.
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.

CHROMOSOMAL LOCATION

Genetic locus: TRIM5 (human) mapping to 11p15.

SOURCE

TRIM5 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TRIM5 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-48319, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

TRIM5 (N-15) is recommended for detection of TRIM5 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)], 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 TRIM5 siRNA (h): sc-61718, TRIM5 shRNA Plasmid (h): sc-61718-SH and TRIM5 shRNA (h) Lentiviral Particles: sc-61718-V.

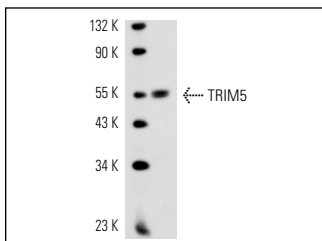
Molecular Weight of TRIM5: 55 kDa.

Positive Controls: human uterus tissue extract.

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.

DATA



TRIM5 (N-15): sc-48319. Western blot analysis of TRIM5 expression in human uterus tissue extract.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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Try **TRIM5 (D-6): sc-373864**, our highly recommended monoclonal alternative to TRIM5 (N-15).