

TIM-3 (182H2B): sc-517632

BACKGROUND

CD4⁺ T helper lymphocytes can be divided into types 1(Th1) and 2 (Th2) on the basis of their cytokine secretion patterns. Th1 cells and their associated cytokines are involved in cell-mediated immunity to intracellular pathogens and delayed-type hypersensitivity reactions. Th2 cells are involved in the control of extracellular helminthic infections and the promotion of atopic and allergic diseases. T cell Ig- and Mucin-domain-containing molecules (TIMs) are a family of molecules expressed on T cells. TIM-3 is a Th1-specific cell surface protein that regulates macrophage activation and enhances the severity of experimental autoimmune encephalomyelitis in mice. TIM-3 binds galectin-9, thereby inducing apoptosis of Th1 cells. This interaction with galectin-9 also stimulates the phosphorylation of Tim-3 on residue Y265 by the interleukin-inducible T cell kinase, Emt.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HAVCR2 (human) mapping to 5q33.3.

SOURCE

TIM-3 (182H2B) is a mouse monoclonal antibody raised against recombinant TIM-3 of human origin.

PRODUCT

Each vial contains 50 µg IgG_{2b} kappa light chain in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

TIM-3 (182H2B) is recommended for detection of TIM-3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and flow cytometry (1 µg per 1 x 10⁶ cells).

Suitable for use as control antibody for TIM-3 siRNA (h): sc-72034, TIM-3 siRNA (m): sc-72015, TIM-3 shRNA Plasmid (h): sc-72034-SH, TIM-3 shRNA Plasmid (m): sc-72015-SH, TIM-3 shRNA (h) Lentiviral Particles: sc-72034-V and TIM-3 shRNA (m) Lentiviral Particles: sc-72015-V.

Molecular Weight of TIM-3: 33 kDa.

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.

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.

PROTOCOLS

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