

# TIM-2 (V-17): sc-79139

## BACKGROUND

CD4<sup>+</sup> 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-2 inhibits T cell activation *in vitro* and T cell-mediated disease *in vivo*. TIM-2 is expressed preferentially in differentiated Th2 cells, and is critical for the negative regulation of Th2 responses during autoimmune inflammation. Further understanding of the mechanisms by which TIM-2 regulates Th2-effector activity may provide insight into the therapeutic modulation of immune-mediated diseases.

## REFERENCES

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2. Kumanogoh, A. and Kikutani, H. 2003. Immune semaphorins: a new area of semaphorin research. *J. Cell Sci.* 116: 3463-3470.
3. Chakravarti, S., Sabatos, C.A., Xiao, S., Illes, Z., Cha, E.K., Sobel, R.A., Zheng, X.X., Strom, T.B. and Kuchroo, V.K. 2005. TIM-2 regulates T helper type 2 responses and autoimmunity. *J. Exp. Med.* 202: 437-444.
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## CHROMOSOMAL LOCATION

Genetic locus: *Timd2* (mouse) mapping to 11 B1.1.

## SOURCE

TIM-2 (V-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of TIM-2 of mouse 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-79139 P, (100 µg 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.

## RESEARCH USE

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

## APPLICATIONS

TIM-2 (V-17) is recommended for detection of TIM-2 of mouse 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TIM-2 siRNA (m): sc-72003, TIM-2 shRNA Plasmid (m): sc-72003-SH and TIM-2 shRNA (m) Lentiviral Particles: sc-72003-V.

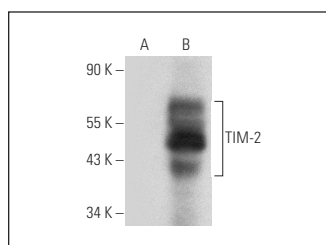
Molecular Weight of TIM-2: 34 kDa.

Positive Controls: TIM-2 (m): 293T Lysate: sc-126101.

## 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



TIM-2 (V-17): sc-79139. Western blot analysis of TIM-2 expression in non-transfected: sc-117752 (A) and mouse TIM-2 transfected: sc-126101 (B) 293T whole cell lysates.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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