

## Anti-Mouse TIM3 Purified


Catalog Number: 14-5870

Also Known As: TIM-3, HAVCR2, T cell immunoglobulin domain, mucin-like domain

RUO: For Research Use Only

### Product Information

Contents: Anti-Mouse TIM3 Purified


 Catalog Number: 14-5870

Clone: RMT3-23


Concentration: 0.5 mg/ml

Host/Isotype: Rat IgG2a, κ

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

 Temperature Limitation: Store at 2-8°C.

 Batch Code: Refer to Vial

 Use By: Refer to Vial

 Caution, contains Azide

### Description

The RMT3-23 monoclonal antibody reacts with mouse Tim-3, a Th1-specific cell surface protein. The RMT3-23 antibody reacts with Tim-3 protein expressed by both BALB/c and C57BL/6 strains of mice. Tim-3, a type I transmembrane protein, contains an immunoglobulin and a mucin-like domain in its extracellular portion and a tyrosine phosphorylation motif in its cytoplasmic portion. Tim-3 is expressed selectively by differentiated CD4<sup>+</sup>Th1 and CD8<sup>+</sup>Tc1 cells, but is absent on CD4<sup>+</sup>Th2 and CD8<sup>+</sup>Tc2 cells. Other hematopoietic cell types, including naïve T cells, B cells, macrophages and dendritic cells, do not express Tim-3, at least at the protein level. Tim-3 expression is upregulated at a late stage of T cell differentiation on Th1 cells after 3 rounds of *in vitro* polarization suggesting a role for this molecule in the transport or effector function of Th1 cells rather than a contribution to T cell differentiation. In an experimental autoimmune encephalomyelitis (EAE) model, Tim-3 was shown to be expressed on most CD4<sup>+</sup> and CD8<sup>+</sup> T cells in the central nervous system at the onset of clinical signs of disease, while less than 2% of CD4<sup>+</sup> cells in the periphery expressed Tim-3 after immunization.

RMT3-23 has been shown to have functional activity; blocks DC recognition of apoptotic cells and also induces autoantibody production.

### Applications Reported

This RMT3-23 antibody has been reported for use in flow cytometric analysis.

### Applications Tested

This RMT3-23 antibody has been tested by flow cytometric analysis of mTIM-3 transfected cells. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

### References

Nakayama M, Akiba H, Takeda K, Kojima Y, Hashiguchi M, Azuma M, Yagita H, Okumura K. Tim-3 mediates phagocytosis of apoptotic cells and cross-presentation. *Blood*. 2009 Apr 16;113(16):3821-30. (RMT3-23, FC, FA, PubMed)

### Related Products

11-4317 Streptavidin FITC

11-4811 Anti-Rat IgG FITC

13-4813 Anti-Rat IgG Biotin (Polyclonal)

14-4321 Rat IgG2a K Isotype Control Purified

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