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Anti-Mouse TIM3 PE

Catalog Number: 12-5870
Also Known As:TIM-3, HAVCR2, T cell immunoglobulin domain, mucin-like domain
RUO: For Research Use Only

Product Information

Contents: Anti-Mouse TIM3 PE
REF Catalog Number: 12-5870
Clone: RMT3-23
Concentration: 0.2 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. Do not freeze. Light sensitive material.
LOT 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 $CD4^+$Th1 and $CD8^+$Tc1 cells, but is absent on $CD4^+$Th2 and $CD8^+$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 $CD4^+$ and $CD8^+$ T cells in the central nervous system at the onset of clinical signs of disease, while less than 2% of $CD4^+$ 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

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

Applications Tested

The RMT3-23 antibody has been tested by flow cytometric analysis of mouse Tim-3 transfected cells. This can be used at less than or equal to 0.5 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 10^5 to 10^8 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

12-4321 Rat IgG2a K Isotype Control PE

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