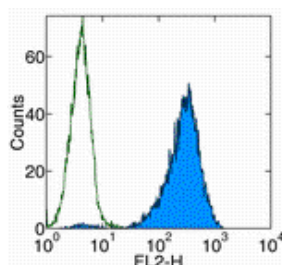


Anti-Mouse TIM3 Functional Grade Purified

Catalog Number: 16-5871

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

RUO: For Research Use Only



Staining of TIM-3 transfected cells with Anti-Mouse TIM-3 PE. Appropriate isotype controls were used (open histogram). Total viable cells were used for analysis.

Product Information

Contents: Anti-Mouse TIM3 Functional Grade Purified

REF **Catalog Number:** 16-5871

Clone: 8B.2C12


Concentration: 1 mg/ml

Host/Isotype: Rat IgG1, κ


Handling Conditions: Use in sterile environment.

Endotoxin Level: Less than 0.001 ng/ μ g antibody, as determined by the LAL assay.

Formulation: aqueous buffer, no sodium azide

 **Temperature Limitation:** Store at 2-8°C.

LOT **Batch Code:** Refer to Vial

 **Use By:** Refer to Vial

Description

The 8B.2C12 monoclonal antibody reacts with mouse Tim-3, a Th1-specific cell surface protein. 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 naive 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. In this model, *in vivo* administration of 8B.2C12 resulted in a hyperacute and atypical disease phenotype. It is postulated that the engagement of Tim-3 during T cell activation results in the expansion and activation of macrophages and increased severity of an autoimmune disease. The Tim gene family may have an important role in the regulation of autoimmunity and allergies.

The 8B.2C12 antibody binds to the Tim-3 BALB/c allele. Reactivity to the C57/Bl6 is significantly weaker than BALB/c.

Applications Reported

8B.2C12 has been reported for use in flow cytometric analysis and functional studies.

Applications Tested

The 8B.2C12 antibody has been tested by flow cytometric analysis of mouse splenocytes and mouse Tim-3 transfected cells and can be used at less than or equal to 0.5 μ g per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

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Related Products

11-4317 Streptavidin FITC

11-4811 Anti-Rat IgG FITC

12-4317 Streptavidin PE

13-4813 Anti-Rat IgG Biotin (Polyclonal)

16-4301 Rat IgG1 K Isotype Control Functional Grade Purified

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