Datasheet: MCA5790PE

Description:	RAT ANTI MOUSE TIM-3:RPE
Specificity:	TIM-3
Other names:	T-CELL IMMUNOGLOBULIN MUCIN 3
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	RMT3-23
Isotype:	IgG2a
Quantity:	100 TESTS

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species

Mouse

Product Form

Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized

Reconstitution

Reconstitute with 1ml distilled water

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide (NaN_3)
1% Bovine Serum Albumin
5% Sucrose

Immunogen	Tim-3-Ig, consisting of amino acids 1-191 of mouse Tim-3, coupled with the Fc portion of mouse IgG2a.
External Database Links	**UniProt:** Q8VIM0 Related reagents **Entrez Gene:** 171285 Havcr2 Related reagents
Synonyms	Tim3, Timd3
Fusion Partners	Lymph node cells from immunised SD rats were fused with cells of the P3U1 myeloma cell line.
Specificity	**Rat anti Mouse Tim-3 antibody, clone RMT3-23** recognizes mouse T-cell immunoglobulin mucin 3, a transmembrane glycoprotein and member of the immunoglobulin superfamily, preferentially expressed by differentiated CD4+ Th1 cells and CD8+ Tc1 (cytotoxic) cells, but not by CD4+ Th2 cells or CD8+ Tc2 cells. Tim-3 acts as a negative regulator of Th1-mediated inflammatory diseases including GVHD, type I diabetes, and EAE (experimental autoimmune encephamyelitis), promotes immunological tolerance, and is a receptor for galectin-9, shown to induce cell death of Th1 cells *in vitro*. Tim-3 is also involved in the regulation of macrophage activation, acts as a phagocytic receptor, and has been shown to recognize apoptotic cells via the IgV domain. Rat anti Mouse Tim-3 antibody, clone RMT3-23 significantly inhibits the efficient phagocytosis of apoptotic cells by peritoneal exudate Mac1+ cells (Nakayama *et al.* 2009).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
References	1. Oikawa, T. *et al.* (2006) Preferential involvement of Tim-3 in the regulation of hepatic CD8+ T cells in murine acute graft-versus-host disease. J Immunol. 177 (7): 4281-7. 2. Nakayama, M. *et al.* (2009) Tim-3 mediates phagocytosis of apoptotic cells and cross-presentation. Blood. 113 (16): 3821-30.
Further Reading	1. Freeman, G.J. *et al.* (2010) TIM genes: a family of cell surface phosphatidylserine receptors that regulate innate and adaptive immunity. Immunol Rev. 235 (1): 172-89.
Storage	Prior to reconstitution store at +4°C. After reconstitution store at +4°C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch

Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA5790PE 20487
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL:RPE (MCA1212PE)

Recommended Useful Reagents

MOUSE SEROBLOCK FcR (BUF041A)
MOUSE SEROBLOCK FcR (BUF041B)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	**Worldwide**	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	**Europe**	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M419356:230616'

Printed on 12 Aug 2023

© 2023 Bio-Rad Laboratories Inc | Legal | Imprint