

Datasheet: MCA5790GA

Description:	RAT ANTI MOUSE TIM-3
Specificity:	TIM-3
Other names:	T-CELL IMMUNOGLOBULIN MUCIN 3
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	RMT3-23
Isotype:	IgG2a
Quantity:	0.1 mg

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	■			1/25 - 1/200
Immunohistology - Frozen	■			
Immunohistology - Paraffin	■			
ELISA			■	
Immunoprecipitation			■	
Western Blotting			■	
Immunofluorescence	■			

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

Target Species	Mouse
Product Form	Purified IgG - liquid
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)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1 mg/ml
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 encephalomyelitis), 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 10⁶ 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.](#)
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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.](#)
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Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

Health And Safety Information

Material Safety Datasheet documentation #10040 available at:
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®549 , DyLight®649 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL \(MCA1212\)](#)

Recommended Useful Reagents

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025A\)](#)

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025C\)](#)

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