

Datasheet: MCA5790GA

BATCH NUMBER 151463

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	0.09% Sodium Azide (NaN ₃)

Stabilisers

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.](#)

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 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.

Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight@550 , DyLight@650 , DyLight@800
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR16...)	DyLight@800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin

Recommended Negative Controls

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

Recommended Useful Reagents

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

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

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