

## Datasheet: MCA5790GA

**BATCH NUMBER 1607**

<b>Description:</b>	RAT ANTI MOUSE TIM-3
<b>Specificity:</b>	TIM-3
<b>Other names:</b>	T-CELL IMMUNOGLOBULIN MUCIN 3
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	RMT3-23
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://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.

<b>Target Species</b>	Mouse
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	0.09% Sodium Azide (NaN <sub>3</sub> )

## Stabilisers

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**Carrier Free** Yes

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**Approx. Protein Concentrations** IgG concentration 1 mg/ml

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**Immunogen** Tim-3-Ig, consisting of amino acids 1-191 of mouse Tim-3, coupled with the Fc portion of mouse IgG2a.

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### External Database Links

**UniProt:**

[Q8VIM0](#) [Related reagents](#)

**Entrez Gene:**

[171285](#) Havcr2 [Related reagents](#)

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**Synonyms** Tim3, Timd3

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**Fusion Partners** Lymph node cells from immunised SD rats were fused with cells of the P3U1 myeloma cell line.

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**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](#)).

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**Flow Cytometry** Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.

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**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.

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

### Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight@550</a> , <a href="#">DyLight@650</a> , <a href="#">DyLight@800</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight@800</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>

### 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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