

## Datasheet: MCA5789GA

<b>Description:</b>	RAT ANTI MOUSE TIM-2
<b>Specificity:</b>	TIM-2
<b>Other names:</b>	T-CELL IMMUNOGLOBULIN MUCIN 2
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	RMT2-25
<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 Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )

<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1 mg/ml
<b>Immunogen</b>	Tim-2-Ig, consisting of amino acids 1-230 of mouse Tim-2, coupled with the Fc portion of mouse IgG2a.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q8R183</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">171284</a>    Timd2    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	Tim2
<b>Fusion Partners</b>	Lymph node cells from immunized Sprague Dawley rats were fused with cells of the P3U1 myeloma cell line.
<b>Specificity</b>	<p><b>Rat anti Mouse TIM-2 antibody, clone RMT2-25</b> recognizes mouse Tim-2 (T-cell immunoglobulin mucin 2), a transmembrane glycoprotein and member of the immunoglobulin superfamily, expressed by activated lymphocytes, developmentally in the 8-cell embryo and blastocyst, and preferentially up-regulated in Th2 cells and down-regulated in Th1 cells.</p> <p>Tim-2 acts as a negative regulator of Th2 cells, and is implicated in the development of atopic disease and other Th2-biased immune responses. Tim-2 also acts as a receptor for Semaphorin 4A, a transmembrane protein expressed on dendritic cells and B cells, which plays a role in the guidance of axonal migration during neuronal development, and has been shown to enhance T cell activation (<a href="#">Suzuki et al. 2007</a>).</p> <p>Signaling by Tim-2 influences the proliferation and antibody production of B cells, during early phase collagen-induced arthritis and Rat anti Mouse TIM-2 antibody, clone RMT2-25 enhances the proliferation of stimulated splenic B cells <i>in vitro</i> (<a href="#">Kawamoto et al. 2011</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>Western Blotting</b>	Clone RMT2-25 recognises a band of approximately 55kDa in Tim-2/L5178Y cells under non-reducing conditions.
<b>References</b>	1. Kawamoto, T. <i>et al.</i> (2011) Anti-T cell immunoglobulin and mucin domain-2 monoclonal antibody exacerbates collagen-induced arthritis by stimulating B cells. <a href="#">Arthritis Res. Ther. 13: R47</a>
<b>Further Reading</b>	1. Freeman, G.J. <i>et al.</i> (2010) TIM genes: a family of cell surface phosphatidylserine receptors that regulate innate and adaptive immunity. <a href="#">Immunol Rev. 235 (1): 172-89.</a>
<b>Storage</b>	This product is shipped at ambient temperature. It is recommended to aliquot and store at

-20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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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 (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<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>

### Recommended Negative Controls

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

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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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