

## Datasheet: MCA5789F

<b>Description:</b>	RAT ANTI MOUSE TIM-2:FITC
<b>Specificity:</b>	TIM-2
<b>Other names:</b>	T-CELL IMMUNOGLOBULIN MUCIN 2
<b>Format:</b>	FITC
<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	■			Neat - 1/10

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 conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid						
<b>Max Ex/Em</b>	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>FITC</td> <td>490</td> <td>525</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	FITC	490	525
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
FITC	490	525					
<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> )						
<b>Stabilisers</b>	1% Bovine Serum Albumin						
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 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.						

### External Database Links

#### UniProt:

[Q8R183](#)

[Related reagents](#)

**Entrez Gene:**

[171284](#) Timd2 [Related reagents](#)

---

<b>Synonyms</b>	Tim2
-----------------	------

---

<b>Fusion Partners</b>	Lymph node cells from immunised 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 to play a critical role 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.</p> <p>Studies using Rat anti Mouse TIM-2 antibody, clone RMT2-25 in mouse, have shown that signaling by Tim-2 can influence the proliferation and antibody production of B cells, during early phase collagen-induced arthritis (<a href="#">Kawamoto et al. 2011</a>).</p> <p>Rat anti Mouse TIM-2 antibody, clone RMT2-25 has been shown to significantly enhance the proliferation of stimulated splenic B cells <i>in vitro</i> (<a href="#">Kawamoto et al. 2011</a>).</p>
--------------------	---

---

<b>Flow Cytometry</b>	<p>Use 10ul of the suggested working dilution to label <math>1 \times 10^6</math> cells in 100ul.</p> <p>The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (<a href="#">BUF041A</a> or <a href="#">BUF041B</a>).</p>
-----------------------	---

---

<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>	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
----------------	--

---

<b>Shelf Life</b>	18 months from date of despatch.
-------------------	----------------------------------

---

<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10041 available at: 10041: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf</a>
--------------------------------------	---

---

<b>Regulatory</b>	For research purposes only
-------------------	----------------------------

---

## Related Products

### Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:FITC \(MCA1212F\)](#)

### 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](mailto: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](mailto: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](mailto:antibody_sales_de@bio-rad.com)

'M303977:170310'

**Printed on 05 May 2018**

---

© 2018 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)