

Datasheet: MCA5789F

Description:	RAT ANTI MOUSE TIM-2:FITC
Specificity:	TIM-2
Other names:	T-CELL IMMUNOGLOBULIN MUCIN 2
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	RMT2-25
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	▪			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.

Target Species	Mouse						
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid						
Max Ex/Em	<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					
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) 1% Bovine Serum Albumin						
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml						

Immunogen	Tim-2-Ig, consisting of amino acids 1-230 of mouse Tim-2, coupled with the Fc portion of mouse IgG2a.
External Database Links	<p>UniProt: Q8R183 Related reagents</p> <p>Entrez Gene: 171284 Timd2 Related reagents</p>
Synonyms	Tim2
Fusion Partners	Lymph node cells from immunized Sprague Dawley rats were fused with cells of the P3U1 myeloma cell line.
Specificity	<p>Rat anti Mouse TIM-2 antibody, clone RMT2-25 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 (Suzuki <i>et al.</i> 2007).</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> (Kawamoto <i>et al.</i> 2011).</p>
Flow Cytometry	<p>Use 10ul of the suggested working dilution to label 1×10^6 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 (BUF041A or BUF041B).</p>
References	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. Arthritis Res. Ther. 13: R47
Further Reading	1. Freeman, G.J. <i>et al.</i> (2010) TIM genes: a family of cell surface phosphatidylserine receptors that regulate innate and adaptive immunity. Immunol Rev. 235 (1): 172-89.
Storage	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. This product is photosensitive and should be protected from light.

Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA5789F 10041
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

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

Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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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
'M384680:210513'

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