

Datasheet: MCA5789GA

BATCH NUMBER 0811

Description:	RAT ANTI MOUSE TIM-2
Specificity:	TIM-2
Other names:	T-CELL IMMUNOGLOBULIN MUCIN 2
Format:	Purified
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	▪			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
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Approx. Protein Concentrations	IgG concentration 1 mg/ml
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Immunogen	Tim-2-Ig, consisting of amino acids 1-230 of mouse Tim-2, coupled with the Fc portion of mouse IgG2a.
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External Database Links	UniProt: Q8R183 Related reagents Entrez Gene: 171284 Timd2 Related reagents
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Synonyms	Tim2
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Fusion Partners	Lymph node cells from immunised Sprague Dawley rats were fused with cells of the P3U1 myeloma cell line.
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Specificity	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.
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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.

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 ([Kawamoto et al. 2011](#)).

Rat anti Mouse TIM-2 antibody, clone RMT2-25 has been shown to significantly enhance the proliferation of stimulated splenic B cells *in vitro* ([Kawamoto et al. 2011](#)).

Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
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Western Blotting	Clone RMT2-25 recognises a band of approximately 55kDa in Tim-2/L5178Y cells under non-reducing conditions.
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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
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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	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
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA5789GA 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
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
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP

Recommended Negative Controls

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

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: 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	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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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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