

# Datasheet: MCA5791EL

Description: RAT ANTI MOUSE TIM-4:Low Endo		
Specificity:	TIM-4	
Other names:	T-CELL IMMUNOGLOBULIN MUCIN 4	
Format:	Low Endotoxin	
Product Type:	Monoclonal Antibody	
Clone:	RMT4-54	
lsotype:	lgG2a	
Quantity:	0.5 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 <u>www.bio-</u>			
	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	•			
	Functional Assays				
	Where this antibody has	not been	tested for	r use in a particular te	chnique this does not
	necessarily exclude its us	se in sucł	n procedu	res. Suggested worki	ng dilutions are given as
	a guide only. It is recomn				
	system using appropriate			-	,
Target Species	Mouse				
Product Form	Purified IgG - liquid				
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissu supernatant			om tissue culture	
Buffer Solution	Phosphate buffered salin	е			
Preservative Stabilisers	None present				

Carrier Free	Yes		
Endotoxin Level	<0.01EU/ug		
Approx. Protein Concentrations	IgG concentration 1.0mg/ml		
Immunogen Tim-4-Ig, consisting of amino acids 1-288 of mouse Tim-4, coupled with the F mouse IgG2a.			
External Database Links	UniProt:         Q6U7R4       Related reagents         Entrez Gene:         276891       Timd4         Related reagents		
Synonyms	Tim4		
Fusion Partners	Lymph node cells from immunised SD rats were fused with cells of the P3U1 myeloma cell line.		
Specificity	<ul> <li>Rat anti Mouse TIM-4 antibody, clone RMT4-54 recognizes mouse Tim-4 (T-cell immunoglobulin mucin 4), a transmembrane glycoprotein and member of the immunoglobulin superfamily, exclusively expressed by antigen-presenting cells, which acts as the natural ligand of Tim-1, involved in T-cell expansion and cytokine production.</li> <li>Tim-4 is reported to be crucial for the phagocytosis of apoptotic cells by peritoneal macrophages, and studies have shown that interaction between Tim-1 on Th2 cells and Tim-4 on DCs, enhances Th2 cell function. The TIM-4 gene locus is associated with predisposition to asthma in both mice and humans and may be considered as a candidate disease gene for asthma.</li> <li>Clone RMT4-54 significantly inhibits the efficient phagocytosis of apoptotic cells by PRMs (peritoneal resident Mac1<sup>+</sup> cells), but not PEMs (peritoneal exudate Mac1<sup>+</sup> cells) (Nakayama, M. <i>et al.</i> 2009).</li> </ul>		
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.		
Histology Positive Control Tissue	Mouse spleen		
References	1. Nakayama, M. <i>et al.</i> (2009) Tim-3 mediates phagocytosis of apoptotic cells and cross- presentation. <u>Blood. 113 (16): 3821-30.</u>		
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. <u>Immunol Rev. 235 (1): 172-89.</u>		
Storage	Store at -20°C only.		

	Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.		
Guarantee	18 months from date of despatch.		
Health And Safety Information	Material Safety Datasheet documentation #10162 available at: 10162: <u>https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf</u>		
Regulatory	For research purposes only		

## **Related Products**

### **Recommended Secondary Antibodies**

Rabbit Anti Rat IgG (STAR17)	<u>FITC</u>
Goat Anti Rat IgG (STAR69)	<u>FITC</u>
Goat Anti Rat IgG (STAR131)	<u>Alk. Phos., Biotin</u>
Goat Anti Rat IgG (STAR73)	<u>RPE</u>
Rabbit Anti Rat IgG (STAR21)	<u>HRP</u>
Rabbit Anti Rat IgG (STAR16)	DyLight®800
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71	.) <u>DyLight®800</u>
Goat Anti Rat IgG (STAR72)	<u>HRP</u>
December ded Newstine Controle	

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL:Low Endotoxin (MCA1212EL)

### **Recommended Useful Reagents**

#### ANTIGEN RETRIEVAL BUFFER, pH8.0 (BUF025A) 100x ANTIGEN RETRIEVAL BUFFER, pH8.0 (BUF025C)

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bio	-rad.com	Email: antibody_sales_de@bio-rad.com

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