

Datasheet: MCA5791GA

Description:	RAT ANTI MOUSE TIM-4
Specificity:	TIM-4
Other names:	T-CELL IMMUNOGLOBULIN MUCIN 4
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	RMT4-54
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 Stabilisers	0.09% Sodium Azide
Carrier Free	Yes
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 Fc portion of 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	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. 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. Clone RMT4-54 significantly inhibits the efficient phagocytosis of apoptotic cells by PRMs (peritoneal resident Mac1⁺ cells), but not PEMs (peritoneal exudate Mac1⁺ cells) (Nakayama, M. et al. 2009).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ 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. Blood. 113 (16): 3821-30.
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.
Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®549 , DyLight®649 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP

Recommended Negative Controls

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

Recommended Useful Reagents

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025A\)](#)

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025C\)](#)

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Printed on 21 Jun 2018