

Datasheet: MCA5791GA

BATCH NUMBER 0811

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	0.09% Sodium Azide

Stabilisers

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 10⁶ cells in 100ul.

Histology Positive Control Tissue Mouse spleen

References 1. Nakayama, M. *et al.* (2009) Tim-3 mediates phagocytosis of apoptotic cells and cross-presentation. [Blood. 113 \(16\): 3821-30.](#)

Further Reading 1. Freeman, G.J. *et al.* (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
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Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA5791GA 10040
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®550 , DyLight®650 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin

Recommended Negative Controls

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

Recommended Useful Reagents

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

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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
'M368409:200529'

Printed on 18 Jan 2024