

Datasheet: MCA5791GA

BATCH NUMBER 163606

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 necessary for the phagocytosis of apoptotic cells by peritoneal macrophages ([Nishi et al. 2014](#)) and 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.

Rat anti Mouse TIM-4 antibody, clone RMT4-54 inhibits the efficient *in vitro* phagocytosis of apoptotic cells by resident peritoneal Mac1⁺ cells), but not inflammatory peritoneal exudate Mac1⁺ cells ([Nakayama et al. 2009](#)).

Flow Cytometry Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

Histology Positive Control Tissue Mouse spleen

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 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.

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

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

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
'M381254:210512'

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