

Datasheet: MCA278

Description:	MOUSE ANTI RAT IgG2a HEAVY CHAIN
Specificity:	IgG2a HEAVY CHAIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	MARG2a-1
Isotype:	IgG1
Quantity:	0.25 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			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			1.25ug/ml as coating antibody
Immunoprecipitation			▪	
Western Blotting			▪	

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	Rat
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.1% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1 mg/ml

Immunogen	purified rat IgG2a.
External Database Links	<p>UniProt: P20760 Related reagents</p> <p>Entrez Gene: 679045 LOC679045 Related reagents</p>
RRID	AB_322914
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the PAI-0 mouse myeloma cell line.
Specificity	<p>Mouse anti Rat IgG2a heavy chain antibody, clone MARG2a-1 recognizes the rat gamma 2a immunoglobulin heavy chain, and does not cross-react with other immunoglobulin classes or subclasses.</p> <p>Avidity of Mouse anti Rat IgG2a heavy chain antibody, clone MARG2a-1 for rat IgG2a = $2.1 \times 10^9 \text{ M}^{-1}$.</p>
ELISA	<p>This product may be used in an indirect ELISA or as a capture antibody in a sandwich ELISA together with MCA1296P as detection reagent.</p> <p>Purified rat IgA (PRP04) may be used as a standard.</p>
References	<ol style="list-style-type: none"> Bazin, H. <i>et al.</i> (1974) Three classes and four (sub)classes of rat immunoglobulins: IgM, IgA, IgE and IgG1, IgG2a, IgG2b, IgG2c. Eur J Immunol. 4 (1): 44-8. Shulman, M. <i>et al.</i> (1978) A better cell line for making hybridomas secreting specific antibodies. Nature. 276 (5685): 269-70. Bazin, H. <i>et al.</i> (1973) Brief communication: Transplantable immunoglobulin-secreting tumors in rats. V. Monoclonal immunoglobulins secreted by 250 ileocecal immunocytomas in LOU-Wsl rats. J Natl Cancer Inst. 51 (4): 1359-61. Sandin, L.C. <i>et al.</i> (2014) Locally delivered CD40 agonist antibody accumulates in secondary lymphoid organs and eradicates experimental disseminated bladder cancer. Cancer Immunol Res. 2 (1): 80-90. Bézie S <i>et al.</i> (2015) Compensatory Regulatory Networks between CD8 T, B, and Myeloid Cells in Organ Transplantation Tolerance. J Immunol. 195 (12): 5805-15. Bézie, S. <i>et al.</i> (2015) Fibrinogen-like protein 2/fibroleukin induces long-term allograft survival in a rat model through regulatory B cells. PLoS One. 10 (3): e0119686.
Further Reading	<ol style="list-style-type: none"> Köhler, G. & Milstein, C. (1975) Continuous cultures of fused cells secreting antibody of predefined specificity. Nature. 256 (5517): 495-7. Bazin, H. <i>et al.</i> (1978) Transplantable IgD immunoglobulin-secreting tumors in rat. J. Immunol. 121: 2077-2082.
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: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR8...)	DyLight@800
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight@488 , DyLight@680 , DyLight@800 , FITC , HRP
Goat Anti Mouse IgG (STAR70...)	FITC

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA1209\)](#)

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
'M383973:210513'

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