

Datasheet: MCA191F

Description:	MOUSE ANTI RAT IgA HEAVY CHAIN:FITC
Specificity:	IgA HEAVY CHAIN
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	MARA-1
Isotype:	IgG1
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 www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			5ug/ml
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	

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 conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
Preparation	Purified IgG prepared by affinity chromatography from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative Stabilisers	0.1% Sodium Azide 50% Glycerol		
Approx. Protein Concentrations	IgG concentration 1 mg/ml		

Immunogen	Purified IR1060 IgA rat myeloma protein.
RRID	AB_322198
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.
Specificity	Mouse anti Rat IgA Heavy Chain antibody, clone MARA-1 recognizes the alpha heavy chain of rat immunoglobulin. Mouse anti Rat IgA Heavy Chain antibody, clone MARA-1 shows no cross-reactivity with other rat immunoglobulin classes.
Flow Cytometry	Use 50ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> 1. Bjersing, J.L. <i>et al.</i> (2002) Loss of ileal IgA+ plasma cells and of CD4+ lymphocytes in ileal Peyer's patches of vitamin A deficient rats. Clin Exp Immunol. 130: 404-8. 2. Budeč, M. <i>et al.</i> (2007) Possible mechanism of acute effect of ethanol on intestinal IgA expression in rat. Int Immunopharmacol. 7: 858-63. 3. Budeč, M. <i>et al.</i> (2009) Blockade of nitric oxide synthesis modulates rat immunoglobulin A. Neuroimmunomodulation. 16: 155-61. 4. Hahn, A. <i>et al.</i> (2010) Mesenteric lymph nodes are not required for an intestinal immunoglobulin A response to oral cholera toxin. Immunology. 129: 427-36. 5. Herías, M.V. <i>et al.</i> (1999) Immunomodulatory effects of Lactobacillus plantarum colonizing the intestine of gnotobiotic rats Clin Exp Immunol. 116: 283-90. 6. Ito, H. <i>et al.</i> (2011) Degree of polymerization of inulin-type fructans differentially affects number of lactic acid bacteria, intestinal immune functions, and immunoglobulin A secretion in the rat cecum. J Agric Food Chem. 59 (10): 5771-8. 7. Kushnir, N. <i>et al.</i> (1998) Dendritic cells and resting B cells form clusters in vitro and in vivo: T cell independence, partial LFA-1 dependence, and regulation by cross-linking surface molecules. J Immunol. 160: 1774-81. 8. Goodrich, M.E. and McGee, D.W. (1998) Regulation of mucosal B cell immunoglobulin secretion by intestinal epithelial cell-derived cytokines. Cytokine. 10: 948-55. 9. Heel, K.A. <i>et al.</i> (1998) The effect of minimum luminal nutrition on mucosal cellularity and immunity of the gut. J Gastroenterol Hepatol. 13: 1015-9. 10. Pérez-Cano FJ (2005) Neonatal immunoglobulin secretion and lymphocyte phenotype in rat small intestine lamina propria. Pediatr Res. 58: 164-9. 11. Peng, Z. <i>et al.</i> (1996) Cross-reactivity and molecular mass of the epsilon chains of the IgE antibodies in dogs, humans, rats, and mice. Int Arch Allergy Immunol. 110: 149-55. 12. Nayak, B.N. <i>et al.</i> (2009) Energy-restricted diets result in higher numbers of CD4+, CD8+, immunoglobulins (A, M, and G), and CD45RA cells in spleen and CD4+, immunoglobulin A, and CD45RA cells in colonic lamina propria of rats. Nutr Res. 2009 Jul;29(7):487-93. 13. Komura, M. <i>et al.</i> (2014) A short-term ingestion of fructo-oligosaccharides increases immunoglobulin A and mucin concentrations in the rat cecum, but the effects are attenuated with the prolonged ingestion. Biosci Biotechnol Biochem. 78: 1592-602. 14. Ito, H. <i>et al.</i> (2011) Degree of polymerization of inulin-type fructans differentially affects number of lactic acid bacteria, intestinal immune functions, and immunoglobulin A secretion in the rat cecum. J Agric Food Chem. 59: 5771-8. 15. Hino, S. <i>et al.</i> (2020) Mucin-Derived O-Glycans Act as Endogenous Fiber and Sustain

Mucosal Immune Homeostasis via Short-Chain Fatty Acid Production in Rat Cecum. [J Nutr. 150 \(10\): 2656-65.](#)

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. This product is photosensitive and should be protected from light.

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

Health And Safety Information Material Safety Datasheet documentation #10328 available at: 10328: <https://www.bio-rad-antibodies.com/uploads/MSDS/10328.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA1209F\)](#)

North & South Tel: +1 800 265 7376

America 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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