

Datasheet: MCA191F

BATCH NUMBER 164713

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	0.1% Sodium Azide		
Stabilisers	50% Glycerol		
Approx. Protein	IgG concentration 1 mg/ml		

Concentrations

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

1. 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.](#)
2. Kushnir, N. *et al.* (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.](#)
3. Herías, M.V. *et al.* (1999) Immunomodulatory effects of Lactobacillus plantarum colonizing the intestine of gnotobiotic rats [Clin Exp Immunol. 116: 283-90.](#)
4. Bjersing, J.L. *et al.* (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.](#)
5. Pérez-Cano FJ (2005) Neonatal immunoglobulin secretion and lymphocyte phenotype in rat small intestine lamina propria. [Pediatr Res. 58: 164-9.](#)
6. Budeč, M. *et al.* (2007) Possible mechanism of acute effect of ethanol on intestinal IgA expression in rat. [Int Immunopharmacol. 7: 858-63.](#)
7. Nayak, B.N. *et al.* (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.](#)
8. Budeč, M. *et al.* (2009) Blockade of nitric oxide synthesis modulates rat immunoglobulin A. [Neuroimmunomodulation. 16: 155-61.](#)
9. Hahn, A. *et al.* (2010) Mesenteric lymph nodes are not required for an intestinal immunoglobulin A response to oral cholera toxin. [Immunology. 129: 427-36.](#)
10. Ito, H. *et al.* (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.](#)
11. Komura, M. *et al.* (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.](#)
12. Tulinská, J. *et al.* (2018) Humoral and cellular immune response in Wistar Han RCC rats fed two genetically modified maize MON810 varieties for 90 days (EU 7th Framework Programme project GRACE). [Arch Toxicol. 92 \(7\): 2385-99.](#)
13. Hino, S. *et al.* (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 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. This product is photosensitive and should be protected from light.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10328 available at: <https://www.bio-rad-antibodies.com/SDS/MCA191F>
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Regulatory For research purposes only

Related Products

Recommended Negative Controls

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

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'M385241:210513'

Printed on 18 Jan 2024

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