

Datasheet: MCA191

Description:	MOUSE ANTI RAT IgA HEAVY CHAIN
Specificity:	IgA HEAVY CHAIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	MARA-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	■			5ug/ml as coating antibody
Immunoprecipitation			■	
Western Blotting			■	
Immunofluorescence	■			

Where this product 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 product 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 IR1060 IgA rat myeloma protein.
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.
ELISA	Mouse anti Rat IgA Heavy Chain antibody, clone MARA-1 may be used as a coating antibody in a sandwich ELISA in combination with Mouse anti Rat κ/λ antibody, clone MARK-1/MARL-15 (MCA1296P) as detection reagent and purified rat IgA (PRP01) as antigen..
References	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.
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.
Shelf Life	18 months from date of despatch.

**Health And Safety
Information**

Material Safety Datasheet documentation available at:
Material Safety Datasheet Documentation #10303 available at:
<https://www.bio-rad-antibodies.com/uploads/MSDS/10303.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Human Anti Mouse IgG1 (HCA036...)	HRP

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

'M314133:180412'

Printed on 13 Apr 2018