

Datasheet: MCA2392A488

BATCH NUMBER 0214

Description:	RAT ANTI MOUSE CD301:Alexa Fluor® 488
Specificity:	CD301
Other names:	MACROPHAGE GALACTOSE SPECIFIC LECTIN
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	ER-MP23
Isotype:	lgG2a
Quantity:	100 TESTS/1ml

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 <u>www.bio-rad-antibodies.com/protocols</u> .					
		Yes No	Not Determined	Suggested Dilution		
	Flow Cytometry	•		Neat - 1/5		
	Where this antibody han necessarily exclude its a guide only. It is recome system using approprise	as not been tested s use in such proce mmended that the ate negative/positiv	for use in a particula dures. Suggested wo user titrates the antib e controls.	r technique this does not orking dilutions are given as ody for use in their own		
Target Species	Mouse					
Product Form	Purified IgG conjugated to Alexa Fluor®488- liquid					
Max Ex/Em	Fluorophore	Excitation Max (nn	n) Emission Max (nn	n)		
	Alexa Fluor®488	495	519			
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant					
Buffer Solution	Phosphate buffered saline					
Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin					
Approx. Protein	IgG concentration 0.05	5 mg/ml				

Concentrations

Immunogen	Balb/c macrophage precursor cell hybrids.		
RRID	AB_872011		
Fusion Partners	Cells from immunised rats were fused with cells of the rat Y3-Ag1.2.3 myeloma cell line.		
Specificity	Rat anti Mouse CD301 antibody, clone ER-MP23 recognizes murine CD301, a ~38 kDa cell surface protein, otherwise known as macrophage galactose N-acetylgalactosamine lectin (MGL) or dendritic cell asialoglycoprotein (DC-ASGPR).		
	In mice, CD301 is predominantly expressed on mature macrophages found associated with a wide range of connective tissues including macrophages in the dermis and the pancreas. Clone ER-MP23 also detects a population of dendritic cells in lymphoid tissue, which are probably recent immigrants from peripheral connective tissue sites. Expression of CD301 is induced by alternative (i.e. IL-4/IL-13 mediated) activation of macrophages and dendritic cells, but not all CD301 positive cells are necessarily IL-4/IL-13 stimulated.		
	Rat anti Mouse CD301 antibody, clone ER-MP23 is reported to block the function of mouse CD301 (<u>Dupasquier <i>et al.</i> 2006</u>). Rat anti Mouse CD301 antibody, clone ER-MP23 binds both MGL1 and MGL2 homologues.		
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.		
References	 Leenen, P.J <i>et al.</i> (1994) Markers of mouse macrophage development detected by monoclonal antibodies. <u>J Immunol Methods. 174 (1-2): 5-19.</u> Geutskens, S.B. <i>et al.</i> (2005) Macrophages in the murine pancreas and their involvement in fetal endocrine development <i>in vitro</i>. <u>J Leukoc Biol. 78 (4): 845-52.</u> Abadie, V. <i>et al.</i> (2005) Neutrophils rapidly migrate via lymphatics after <i>Mycobacterium bovis</i> BCG intradermal vaccination and shuttle live bacilli to the draining lymph nodes. <u>Blood. 106: 1843-50.</u> Dupasquier, M. <i>et al.</i> (2004) Macrophages and dendritic cells constitute a major subpopulation of cells in the mouse dermis. <u>J Invest Dermatol. 123: 876-9.</u> Sindrilaru, A. <i>et al.</i> (2011) An unrestrained proinflammatory M1 macrophage population induced by iron impairs wound healing in humans and mice. <u>J Clin Invest. 121: 985-97.</u> Westcott, D.J. <i>et al.</i> (2009) MGL1 promotes adipose tissue inflammation and insulin resistance by regulating 7/4hi monocytes in obesity. <u>J Exp Med. 206: 3143-56.</u> Fischer-Posovszky, P. <i>et al.</i> (2011) Targeted deletion of adipocytes by apoptosis leads to adipose tissue recruitment of alternatively activated m2 macrophages. <u>Endocrinology. 152: 3074-81.</u> Spite, M. <i>et al.</i> (2011) Deficiency of the Leukotriene B4 Receptor, BLT-1, Protects against Systemic Insulin Resistance in Diet-Induced Obesity. <u>J Immunol. 187: 1942-9.</u> Raes, G. <i>et al.</i> (2005) Macrophage galactose-type C-type lectins as novel markers for alternatively activated macrophages elicited by parasitic infections and allergic airway inflammation. <u>J Leukoc Biol. 77: 321-7.</u> Freire, T. <i>et al.</i> (2010) Glycosidic Tn-based vaccines targeting dermal dendritic cells favor germinal center B-cell development and potent antibody response in the absence of 		

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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.
Guarantee	12 months from date of despatch
Acknowledgements	This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2392A488 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL:Alexa Fluor® 488 (MCA1212A488)

North & South	Tel: +1 800 265 7376 Worldwide	Tel: +44 (0)1865 852 700 Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751	Fax: +44 (0)1865 852 739	Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-rad.com	Email: antibody_sales_uk@bio-rad.com	Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M366799:200529'

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