Datasheet: MCA2392A647T

BATCH NUMBER 155980

Description:	RAT ANTI MOUSE CD301:Alexa Fluor® 647
Specificity:	CD301
Other names:	MACROPHAGE GALACTOSE SPECIFIC LECTIN
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	ER-MP23
Isotype:	IgG2a
Quantity:	25 TESTS/0.25ml

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	▪			Neat - 1/10

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

Mouse

Product Form

Purified IgG conjugated to Alexa Fluor®647- liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®647	650	665

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 mg/ml

Concentrations	
Immunogen	Balb/c macrophage precursor cell hybrids.
RRID	AB_1101873
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 (Dupasquier *et al.* 2006). 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	1. Leenen, P.J *et al.* (1994) Markers of mouse macrophage development detected by monoclonal antibodies. J Immunol Methods. 174 (1-2): 5-19. 2. Geutskens, S.B. *et al.* (2005) Macrophages in the murine pancreas and their involvement in fetal endocrine development *in vitro*. J Leukoc Biol. 78 (4): 845-52. 3. Abadie, V. *et al.* (2005) Neutrophils rapidly migrate via lymphatics after *Mycobacterium bovis* BCG intradermal vaccination and shuttle live bacilli to the draining lymph nodes. Blood. 106: 1843-50. 4. Dupasquier, M. *et al.* (2004) Macrophages and dendritic cells constitute a major subpopulation of cells in the mouse dermis. J Invest Dermatol. 123: 876-9. 5. Sindrilaru, A. *et al.* (2011) An unrestrained proinflammatory M1 macrophage population induced by iron impairs wound healing in humans and mice. J Clin Invest. 121: 985-97. 6. Westcott, D.J. *et al.* (2009) MGL1 promotes adipose tissue inflammation and insulin resistance by regulating 7/4hi monocytes in obesity. J Exp Med. 206: 3143-56. 7. Fischer-Posovszky, P. *et al.* (2011) Targeted deletion of adipocytes by apoptosis leads to adipose tissue recruitment of alternatively activated m2 macrophages. Endocrinology. 152: 3074-81. 8. Spite, M. *et al.* (2011) Deficiency of the Leukotriene B4 Receptor, BLT-1, Protects against Systemic Insulin Resistance in Diet-Induced Obesity. J Immunol. 187: 1942-9. 9. Raes, G. *et al.* (2005) Macrophage galactose-type C-type lectins as novel markers for alternatively activated macrophages elicited by parasitic infections and allergic airway inflammation. J Leukoc Biol. 77: 321-7. 10. Freire, T. *et al.* (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/MCA2392A647T
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL:Alexa Fluor® 647 (MCA1212A647)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M366802:200529'

Printed on 12 May 2026