

Datasheet: MCA1898GA

Description: RAT ANTI MOUSE CD1		
Specificity: CD115		
Other names:	c-fms	
Format:	Purified	
Product Type:	Monoclonal Antibody	
Clone: 604B5 2E11		
Isotype:	lgG1	
Quantity: 0.1 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	•			1/25 - 1/50
Immunohistology - Frozen				
Immunohistology - Paraffin				
ELISA				
Immunoprecipitation				
Western Blotting			•	

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 - liquid
Preparation	Purified IgG prepared by ion exchange chromatography
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml

Immunogen	Raw 264 cells.
External Database Links	UniProt: P09581 Related reagents Entrez Gene: 12978 Csf1r Related reagents
Synonyms	Csfmr, Fms
RRID	AB_2085220
Fusion Partners	Spleen cells from immunised Sprague Dawley rats were fused with cells of the P3-653 myeloma cell line.
Specificity	Rat anti Mouse CD115 antibody, clone 604B5 2E11 recognizes the murine CD115 cell surface antigen, also known as the M-CSF receptor and as c-fms. Murine CD115 is a 958 amino acid 110kDa single pass type I transmembrane glycoprotein with tyrosine kinase activity and acts as a membrane receptor for M-CSF. CD115 is expressed by cells of the monocytic lineage and by progenitor cells. Rat anti Mouse CD115 antibody, clone 604B5 2E11 has been shown to inhibit <i>in vitro</i> colony formation in response to M-CSF in both rats and mice.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	 Shadduck, R.K. <i>et al.</i> (1996) Paradoxical stimulation of normal and leukemic rat hematopoiesis by monoclonal antibody to CSF-1 receptor. Exp Hematol. 24 (2): 314-7. Gilmore, G.L. & Shadduck, R.K. (1995) Inhibition of day-12 spleen colony-forming units by a monoclonal antibody to the murine macrophage/monocyte colony-stimulating factor receptor. Blood. 85 (10): 2731-4. MacDonald, K.P. <i>et al.</i> (2005) The colony-stimulating factor 1 receptor is expressed on dendritic cells during differentiation and regulates their expansion. J Immunol. 175 (3): 1399-405. Buono, M. <i>et al.</i> (2010) Sulfatase modifying factor 1-mediated fibroblast growth factor signaling primes hematopoietic multilineage development. J Exp Med. 207 (8): 1647-60. Weingärtner, O. <i>et al.</i> (2011) Differential effects on inhibition of cholesterol absorption by plant stanol and plant sterol esters in apoE-/- mice. Cardiovasc Res. 90: 484-92. Hayashi, Y. <i>et al.</i> (2010) Lumican is required for neutrophil extravasation following corneal injury and wound healing. J Cell Sci.123: 2987-95. Herold, S. <i>et al.</i> (2008) Lung epithelial apoptosis in influenza virus pneumonia: the role of macrophage-expressed TNF-related apoptosis-inducing ligand. J Exp Med. 205: 3065-77.

- 8. Pillai, M.M. *et al.* (2009) Inducible transgenes under the control of the hCD68 promoter identifies mouse macrophages with a distribution that differs from the F4/80 and CSF-1R-expressing populations. <u>Exp Hematol. 37: 1387-92.</u>
- 9. Sasmono, R.T. et al. (2007) Mouse neutrophilic granulocytes express mRNA encoding

the macrophage colony-stimulating factor receptor (CSF-1R) as well as many other macrophage-specific transcripts and can transdifferentiate into macrophages *in vitro* in response to CSF-1. J Leukoc Biol. 82: 111-23.

- 10. Dioszeghy V *et al.* (2008) 12/15-Lipoxygenase regulates the inflammatory response to bacterial products *in vivo*. <u>J Immunol</u>. 181 (9): 6514-24.
- 11. Fancke B *et al.* (2008) M-CSF: a novel plasmacytoid and conventional dendritic cell poietin. <u>Blood</u>. 111 (1): 150-9.
- 12. van Dommelen, S.L. *et al.* (2006) Perforin and granzymes have distinct roles in defensive immunity and immunopathology. <u>Immunity. 25 (5): 835-48.</u>
- 13. Scheller, M. *et al.* (1999) Altered development and cytokine responses of myeloid progenitors in the absence of transcription factor, interferon consensus sequence binding protein. Blood. 94 (11): 3764-71.
- 14. O'Dea, K.P. *et al.* (2009) Mobilization and margination of bone marrow Gr-1high monocytes during subclinical endotoxemia predisposes the lungs toward acute injury. <u>J Immunol. 182 (2): 1155-66.</u>
- 15. Nahrendorf, M. *et al.* (2007) The healing myocardium sequentially mobilizes two monocyte subsets with divergent and complementary functions. <u>J Exp Med. 204 (12):</u> 3037-47.
- 16. Juss, J.K. *et al.* (2012) Functional redundancy of class I phosphoinositide 3-kinase (PI3K) isoforms in signaling growth factor-mediated human neutrophil survival. <u>PLoS One.</u> 7 (9): e45933.

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.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...) FITC

Goat Anti Rat IgG (STAR73...) RPE

Rabbit Anti Rat IgG (STAR16...) DyLight®800

Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) DyLight®650, DyLight®800

Goat Anti Rat IgG (STAR72...)

Rabbit Anti Rat IgG (STAR21...)

Rabbit Anti Rat IgG (STAR17...)

FITC

Goat Anti Rat IgG (STAR131...) Alk. Phos., Biotin

 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

Fax: +1 919 878 3751 Fax: +44 (0)1865 852 739 Fax: +49 (0) 89 8090 95 50 To Email: antibody_sales_us@bio-rad.com Email: antibody_sales_uk@bio-rad.com Email: antibody_sales_de@bio-rad.com a

batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M383097:210513'

Printed on 08 Oct 2021

© 2021 Bio-Rad Laboratories Inc | Legal | Imprint