

Datasheet: MCA1898GA

Description:	RAT ANTI MOUSE CD115
Specificity:	CD115
Other names:	c-fms
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	604B5 2E11
Isotype:	IgG1
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:

Entrez Gene:

[12978](#) Csf1r [Related reagents](#)

Synonyms	Csfmr, Fms
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Fusion Partners	Spleen cells from immunised Sprague Dawley rats were fused with cells of the P3-653 myeloma cell line.
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Specificity	<p>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.</p> <p>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.</p>
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Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
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References	<ol style="list-style-type: none">1. 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): 314-7.2. 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): 2731-4.3. 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): 1399-405.4. 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): 1647-60.5. 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: 484-92.6. Hayashi, Y. <i>et al.</i> (2010) Lumican is required for neutrophil extravasation following corneal injury and wound healing. J Cell Sci. 123: 2987-95.7. 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. <i>et al.</i> (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. Exp Hematol. 37: 1387-92.9. Sasmono, R.T. <i>et al.</i> (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 <i>in vitro</i> in response to CSF-1. J Leukoc Biol. 82: 111-23.10. Dioszeghy V <i>et al.</i> (2008) 12/15-Lipoxygenase regulates the inflammatory response to bacterial products <i>in vivo</i>. J Immunol. 181 (9): 6514-24.11. Fancke B <i>et al.</i> (2008) M-CSF: a novel plasmacytoid and conventional dendritic cell poietin. Blood. 111 (1): 150-9.12. van Dommelen, S.L. <i>et al.</i> (2006) Perforin and granzymes have distinct roles in defensive immunity and immunopathology. Immunity. 25 (5): 835-48.13. Scheller, M. <i>et al.</i> (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.
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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. [J Immunol. 182 \(2\): 1155-66.](#)
15. Nahrendorf, M. *et al.* (2007) The healing myocardium sequentially mobilizes two monocyte subsets with divergent and complementary functions. [J Exp Med. 204 \(12\): 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. [PLoS One. 7 \(9\): e45933.](#)

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 #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®549 , DyLight®649 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP

Recommended Negative Controls

[RAT IgG1 NEGATIVE CONTROL \(MCA1211\)](#)

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
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