

## Datasheet: MCA1898PET

<b>Description:</b>	RAT ANTI MOUSE CD115:RPE
<b>Specificity:</b>	CD115
<b>Other names:</b>	c-fms
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	604B5 2E11
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat

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.

<b>Target Species</b>	Mouse		
<b>Product Form</b>	Purified IgG - lyophilized		
<b>Reconstitution</b>	Reconstitute with 0.25 ml distilled water		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	RPE 488nm laser	496	578
<b>Preparation</b>	Purified IgG prepared by ion exchange chromatography		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin 5% Sucrose		

Immunogen Raw 264 cells.

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**External Database Links**

**UniProt:**

[P09581](#)   [Related reagents](#)

**Entrez Gene:**

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

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**Synonyms** Csfmr, Fms

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**RRID** AB\_2085219

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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** **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 *in vitro* colony formation in response to M-CSF in both rats and mice.

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**Flow Cytometry** Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.

The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity fc receptors. This may be reduced by using SeroBlock FcR ([BUF041A/B](#)).

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**References**

1. Shadduck, R.K. *et al.* (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. *et al.* (2005) The colony-stimulating factor 1 receptor is expressed on dendritic cells during differentiation and regulates their expansion. [J Immunol. 175 \(3\): 1399-405.](#)
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5. Weingärtner, O. *et al.* (2011) Differential effects on inhibition of cholesterol absorption by plant stanol and plant sterol esters in apoE<sup>-/-</sup> mice. [Cardiovasc Res. 90: 484-92.](#)
6. Hayashi, Y. *et al.* (2010) Lumican is required for neutrophil extravasation following corneal injury and wound healing. [J Cell Sci. 123: 2987-95.](#)
7. Herold, S. *et al.* (2008) Lung epithelial apoptosis in influenza virus pneumonia: the role of macrophage-expressed TNF-related apoptosis-inducing ligand. [J Exp Med. 205: 3065-77.](#)
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12. van Dommelen, S.L. *et al.* (2006) Perforin and granzymes have distinct roles in defensive immunity and immunopathology. [Immunity. 25 \(5\): 835-48.](#)
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. [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.](#)

<b>Storage</b>	Prior to reconstitution store at +4°C. After reconstitution store at +4°C. DO NOT FREEZE. This product should be stored undiluted. Should this product contain a precipitate we recommend microcentrifugation before use.
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #20487 available at: 20487: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/20487.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/20487.pdf</a>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](http://bio-rad-antibodies.com/datasheets)

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