

Datasheet: MCA1898PE

Description:	RAT ANTI MOUSE CD115:RPE
Specificity:	CD115
Other names:	c-fms
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	604B5 2E11
Isotype:	IgG1
Quantity:	100 TESTS

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

Where this product 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 product for use in their own system using appropriate negative/positive controls.

Target Species	Mouse		
Product Form	Purified IgG - lyophilized		
Reconstitution	Reconstitute with 1.0 ml distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
Preparation	Purified IgG prepared by ion exchange chromatography from ascites		
Buffer Solution	Phosphate buffered saline		
Preservative Stabilisers	0.09% sodium azide (NaN ₃)		
	1% bovine serum albumin		
Immunogen	Raw 264 cells.		

External Database
Links

UniProt:

[P09581](#)

[Related reagents](#)

Entrez Gene:

[12978](#)

Csf1r

[Related reagents](#)

Synonyms

Csfmr, Fms

RRID

AB_323314

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

Flow Cytometry

Use 10µl of the suggested working dilution to label 10⁶ cells in 100µl. The Fc region of monoclonal antibodies may bind to cells expressing low affinity fc receptors. This may be reduced by using SeroBlock FcR ([BUF041A/BUF041B](#)).

References

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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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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.](#)
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. [Exp Hematol. 37: 1387-92.](#)
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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.](#)

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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-1^{high} 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	Prior to reconstitution store at +4°C. Following reconstitution store at +4°C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.
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Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #20487 available at: 20487: https://www.bio-rad-antibodies.com/uploads/MSDS/20487.pdf
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Regulatory	For research purposes only
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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](https://www.bio-rad-antibodies.com/datasheets)
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Printed on 08 Feb 2023