

Datasheet: MCA1841PE

BATCH NUMBER 151116

Description:	MOUSE ANTI HUMAN CD117:RPE
Specificity:	CD117
Other names:	C-KIT, SCF-R
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	104D2
Isotype:	IgG1
Quantity:	100 TESTS/0.5ml

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 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	Human								
Species Cross Reactivity	Reacts with: Cynomolgus monkey, Bovine N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.								
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - liquid								
Max Ex/Em	<table><tr><th>Fluorophore</th><th>Excitation Max (nm)</th><th>Emission Max (nm)</th></tr><tr><td>RPE 488nm laser</td><td>496</td><td>578</td></tr></table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	RPE 488nm laser	496	578		
Fluorophore	Excitation Max (nm)	Emission Max (nm)							
RPE 488nm laser	496	578							
Buffer Solution	Phosphate buffered saline								
Preservative	0.09% Sodium Azide								

Stabilisers	0.2% Bovine Serum Albumin
Immunogen	MOLM-1 megakaryocyte cell line
External Database Links	<p>UniProt: P10721 Related reagents</p> <p>Entrez Gene: 3815 KIT Related reagents</p>
RRID	AB_322904
Specificity	<p>Mouse anti Human CD117 antibody, clone 104D2 recognizes the human CD117 cell surface antigen, a 145 kDa glycoprotein also known as c-kit. CD117 is expressed by some haematopoietic stem cells (approx. 70% of CD34+ve cells in normal bone marrow are CD117+ve), some acute myeloid leukaemias and by mast cells.</p> <p>Functionally CD117 is a receptor for stem cell factor, and has receptor tyrosine kinase activity.</p> <p>Mouse anti Human CD117 antibody, clone 104D2 is non-neutralizing.</p>
Flow Cytometry	Use 5ul of the suggested working dilution to label 10 ⁶ cells in 100ul
References	<ol style="list-style-type: none"> 1. Broudy, V.C. <i>et al.</i> (1998) Analysis of c-kit receptor dimerization by fluorescence resonance energy transfer. Blood. 91 (3): 898-906. 2. Yoshino, N. <i>et al.</i> (2000) Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of cynomolgus monkeys (<i>Macaca fascicularis</i>) by using anti-human cross-reactive antibodies. Exp Anim. 49 (2): 97-110. 3. Jayapal, M. <i>et al.</i> (2006) Genome-wide gene expression profiling of human mast cells stimulated by IgE or FcepsilonRI-aggregation reveals a complex network of genes involved in inflammatory responses. BMC Genomics. 7: 210. 4. Randall, V.A. <i>et al.</i> (2008) Stem cell factor/c-Kit signalling in normal and androgenetic alopecia hair follicles. J Endocrinol. 197: 11-23. 5. Venkata, N.S.G. <i>et al.</i> (2018) Isolation and characterization of mesenchymal stem cells from human fetus heart. PLoS One. 13 (2): e0192244.
Storage	<p>Store at +4°C.</p> <p>DO NOT FREEZE.</p> <p>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.</p>
Guarantee	6 months from date of despatch

**Health And Safety
Information**

Material Safety Datasheet documentation #10041 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA1841PE>
10041

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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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)

'M344766:190118'

Printed on 28 May 2025

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