

## Datasheet: MCA1841PE

<b>Description:</b>	MOUSE ANTI HUMAN CD117:RPE
<b>Specificity:</b>	CD117
<b>Other names:</b>	C-KIT, SCF-R
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	104D2
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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

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

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578

### Buffer Solution

Phosphate buffered saline

### Preservative Stabilisers

0.09% sodium azide (NaN<sub>3</sub>)  
0.2% bovine serum albumin

<b>Immunogen</b>	MOLM-1 megakaryocyte cell line
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P10721</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">3815</a>    KIT    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_322904
<b>Specificity</b>	<p><b>Mouse anti Human CD117 antibody, clone 104D2</b> 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>
<b>Flow Cytometry</b>	Use 5µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl
<b>References</b>	<ol style="list-style-type: none"> <li>1. Broudy, V.C. <i>et al.</i> (1998) Analysis of c-kit receptor dimerization by fluorescence resonance energy transfer. <a href="#">Blood. 91 (3): 898-906.</a></li> <li>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. <a href="#">Exp Anim. 49 (2): 97-110.</a></li> <li>3. Jayapal, M. <i>et al.</i> (2006) Genome-wide gene expression profiling of human mast cells stimulated by IgE or FcεpsilonRI-aggregation reveals a complex network of genes involved in inflammatory responses. <a href="#">BMC Genomics. 7: 210.</a></li> <li>4. Randall, V.A. <i>et al.</i> (2008) Stem cell factor/c-Kit signalling in normal and androgenetic alopecia hair follicles. <a href="#">J Endocrinol. 197: 11-23.</a></li> <li>5. Venkata, N.S.G. <i>et al.</i> (2018) Isolation and characterization of mesenchymal stem cells from human fetus heart. <a href="#">PLoS One. 13 (2): e0192244.</a></li> </ol>
<b>Storage</b>	<p>This product is shipped at ambient temperature.</p> <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>
<b>Guarantee</b>	Guaranteed for 12 months from the date of despatch or until the date of expiry, whichever comes first. Please see label for expiry date.
<b>Health And Safety Information</b>	<p>Material Safety Datasheet documentation #10041 available at:  <a href="https://www.bio-rad-antibodies.com/SDS/MCA1841PE">https://www.bio-rad-antibodies.com/SDS/MCA1841PE</a></p>

**Regulatory**

For research purposes only

**Related Products****Recommended Negative Controls**[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)**Recommended Useful Reagents**[HUMAN SEROBLOCK \(BUF070A\)](#)[HUMAN SEROBLOCK \(BUF070B\)](#)**North & South**

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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://bio-rad-antibodies.com/datasheets)

'M442613:250528'

**Printed on 28 May 2025**