

## Datasheet: MCA1841PET

<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>	25 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](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>	Human		
<b>Species Cross Reactivity</b>	Reacts with: Cynomolgus monkey, Bovine <b>N.B.</b> Antibody reactivity and working conditions may vary between species.		
<b>Product Form</b>	Purified IgG conjugated to R. Phycoerythrin (RPE) - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	RPE 488nm laser	496	578
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative</b>	0.09% Sodium Azide		
<b>Stabilisers</b>	0.2% Bovine Serum Albumin		
<b>Immunogen</b>	MOLM-1 megakaryocyte cell line		
<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P10721</a> <a href="#">Related reagents</a>		
	<b>Entrez Gene:</b> <a href="#">3815</a> KIT <a href="#">Related reagents</a>		

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**Specificity** **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.

Functionally CD117 is a receptor for stem cell factor, and has receptor tyrosine kinase activity.

Mouse anti Human CD117 antibody, clone 104D2 is non-neutralising.

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**Flow Cytometry** Use 20 ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.

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**References**

1. Broudy, V.C. *et al.* (1998) Analysis of c-kit receptor dimerization by fluorescence resonance energy transfer. [Blood. 91 \(3\): 898-906.](#)
2. Yoshino, N. *et al.* (2000) Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of cynomolgus monkeys (*Macaca fascicularis*) by using anti-human cross-reactive antibodies. [Exp Anim. 49 \(2\): 97-110.](#)
3. Jayapal, M. *et al.* (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. *et al.* (2008) Stem cell factor/c-Kit signalling in normal and androgenetic alopecia hair follicles. [J Endocrinol. 197: 11-23.](#)
5. GarikipatiV, N.S. *et al.* (2018) Isolation and characterization of mesenchymal stem cells from human fetus heart. [PLoS One. 13 \(2\): e0192244.](#)

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**Storage** 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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**Shelf Life** 6 months from date of despatch.

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

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

### Recommended Useful Reagents

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

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

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