

Datasheet: MCA1841PE

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 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 (NaN₃)
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 5µl of the suggested working dilution to label 10 ⁶ cells in 100µl
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 FcεRI 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. 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	Guaranteed for 12 months from the date of despatch or until the date of expiry, whichever comes first. Please see label for expiry date.
Health And Safety Information	<p>Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1841PE 10041</p>

Related Products

Recommended Negative Controls

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

Recommended Useful Reagents

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

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

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M437868:250319'

Printed on 19 Mar 2025
