

## Datasheet: MCA1841

**BATCH NUMBER 164719**

<b>Description:</b>	MOUSE ANTI HUMAN CD117
<b>Specificity:</b>	CD117
<b>Other names:</b>	C-KIT, SCF-R
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	104D2
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.1 mg

## 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	▪			1/2 - 1/20
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	

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.

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	<p>Reacts with: Cynomolgus monkey, Bovine</p> <p><b>N.B.</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.</p>
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 0.5 mg/ml
<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_322902
<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 10µl 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 FcepsilonRI-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>	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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<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.
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1841">https://www.bio-rad-antibodies.com/SDS/MCA1841</a> 10040
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight@488</a> , <a href="#">DyLight@550</a> , <a href="#">DyLight@650</a> , <a href="#">DyLight@680</a> , <a href="#">DyLight@800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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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