

# Datasheet: MCA1781PE

**BATCH NUMBER 148622**

<b>Description:</b>	MOUSE ANTI CANINE CD21:RPE
<b>Specificity:</b>	CD21
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CA2.1D6
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 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 (1)	▪			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.

**(1) N.B. MCA1781PE should NOT be used with MCA1774F (mouse anti canine CD3), in dual colour flow cytometry, due to non-specific interactions between the two reagents.**

Target Species	Dog		
Species Cross Reactivity	Reacts with: Horse, Cat, Raccoon <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.		
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
Reconstitution	Reconstitute with 1 ml distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578

<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide 1% Bovine Serum Albumin 5% Sucrose
<b>RRID</b>	AB_323238
<b>Specificity</b>	<p><b>Mouse anti Canine CD21 antibody, clone CA2.1D6</b> recognizes canine CD21, also known as Complement receptor type 2. CD21 is a cell surface antigen expressed by canine B lymphocytes.</p> <p>The antigen recognized may be the canine homologue of human CD21, but this has not been fully confirmed.</p> <p>Mouse anti Canine CD21 antibody , clone CA2.1D6 also recognizes the CD21 antigen in Felids. Expression in cats is analogous to that seen in dogs with strong expression on lymphocytes, in a manner mutually exclusive with expression of CD4 or CD8. Mouse anti Canine CD21 antibody, clone CA2.1D6 immunoprecipitates a ~145 kDa protein from feline lymphocytes, similar to the protein immunoprecipitated by the antibody from canine lymphocytes (<a href="#">Dean <i>et al.</i> 1996</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells or cells or 100ul whole blood.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Cobbold, S. &amp; Metcalfe, S. (1994) Monoclonal antibodies that define canine homologues of human CD antigens: summary of the First International Canine Leukocyte Antigen Workshop (CLAW). <a href="#">Tissue Antigens. 43 (3): 137-54.</a></li> <li>2. Brodersen, R. <i>et al.</i> (1998) Analysis of the immunological cross reactivities of 213 well characterized monoclonal antibodies with specificities against various leucocyte surface antigens of human and 11 animal species. <a href="#">Vet Immunol Immunopathol. 64 (1): 1-13.</a></li> <li>3. Dean, G.A. <i>et al.</i> (1996) Proviral burden and infection kinetics of feline immunodeficiency virus in lymphocyte subsets of blood and lymph node. <a href="#">J Virol. 70 (8): 5165-9.</a></li> <li>4. Faldyna, M. <i>et al.</i> (2004) Lymphocyte subsets in synovial fluid from clinically healthy joints of dogs. <a href="#">Acta Vet. Brno 73: 73-8.</a></li> <li>5. Bund, D. <i>et al.</i> (2010) Canine-DCs using different serum-free methods as an approach to provide an animal-model for immunotherapeutic strategies. <a href="#">Cell Immunol. 263: 88-98.</a></li> <li>6. Huang, Y.C. <i>et al.</i> (2008) CD5-low expression lymphocytes in canine peripheral blood show characteristics of natural killer cells. <a href="#">J Leukoc Biol. 84: 1501-10.</a></li> <li>7. Mortarino, M. <i>et al.</i> (2009) ZAP-70 and Syk expression in canine lymphoid cells and preliminary results on leukaemia cases. <a href="#">Vet Immunol Immunopathol. 128: 395-401.</a></li> <li>8. Reggeti, F. <i>et al.</i> (2008) CD134 and CXCR4 expression corresponds to feline immunodeficiency virus infection of lymphocytes, macrophages and dendritic cells. <a href="#">J Gen Virol. 89: 277-87.</a></li> <li>9. Wang, Y.S. <i>et al.</i> (2007) Characterization of canine monocyte-derived dendritic cells</li> </ol>

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#### Storage

Prior to reconstitution store at +4°C. Following reconstitution 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.

#### Guarantee

12 months from date of despatch

#### Health And Safety Information

Material Safety Datasheet documentation #20487 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1781PE>  
20487

#### Regulatory

For research purposes only

## Related Products

### Recommended Negative Controls

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

#### North & South America

Tel: +1 800 265 7376  
Fax: +1 919 878 3751  
Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto: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](mailto:antibody_sales_de@bio-rad.com)

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'M378910:210311'

Printed on 15 Apr 2024