

## Datasheet: MCA1781PE

**BATCH NUMBER 166277**

<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 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.

**(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

**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) - 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 from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> ) 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 et al. 1996</a>).</p>
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells or cells or 100µl 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. Dean, G.A. et al. (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>3. Brodersen, R. et al. (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>4. Hsiao, Y.W. et al. (2004) Tumor-infiltrating lymphocyte secretion of IL-6 antagonizes tumor-derived TGF-beta 1 and restores the lymphokine-activated killing activity. <a href="#">J Immunol. 172: 1508-14.</a></li> <li>5. Horn, P.A. et al. (2004) Efficient lentiviral gene transfer to canine repopulating cells using an overnight transduction protocol. <a href="#">Blood. 103: 3710-6.</a></li> <li>6. Faldyna, M. et al. (2004) Lymphocyte subsets in synovial fluid from clinically healthy joints of dogs. <a href="#">Acta Vet. Brno 73: 73-8.</a></li> <li>7. Jubala, C.M. et al. (2005) CD20 expression in normal canine B cells and in canine non-Hodgkin lymphoma. <a href="#">Vet Pathol. 42: 468-76.</a></li> <li>8. Yuasa, K. et al. (2007) Injection of a recombinant AAV serotype 2 into canine skeletal muscles evokes strong immune responses against transgene products. <a href="#">Gene Ther. 14: 1249-60.</a></li> </ol>

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<b>Storage</b>	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.
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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #20487 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1781PE">https://www.bio-rad-antibodies.com/SDS/MCA1781PE</a> 20487
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Negative Controls

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

<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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