

## Datasheet: MCA1781A647

**BATCH NUMBER 171003**

<b>Description:</b>	MOUSE ANTI CANINE CD21:Alexa Fluor® 647
<b>Specificity:</b>	CD21
<b>Format:</b>	ALEXA FLUOR® 647
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CA2.1D6
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS/1ml

### 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 - 1/10

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

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 Alexa Fluor® 647 - liquid

#### Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®647	650	665

#### Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

#### Buffer Solution

Phosphate buffered saline

<b>Preservative</b>	0.09% sodium azide (NaN <sub>3</sub> )
<b>Stabilisers</b>	1% bovine serum albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05mg/ml
<b>RRID</b>	AB_1658137
<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 100µl whole blood
<b>References</b>	<ol style="list-style-type: none"> <li>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>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>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>Hsiao, Y.W. <i>et al.</i> (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>Horn, P.A. <i>et al.</i> (2004) Efficient lentiviral gene transfer to canine repopulating cells using an overnight transduction protocol. <a href="#">Blood. 103: 3710-6.</a></li> <li>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>Jubala, C.M. <i>et al.</i> (2005) CD20 expression in normal canine B cells and in canine non-Hodgkin lymphoma. <a href="#">Vet Pathol. 42: 468-76.</a></li> <li>Yuasa, K. <i>et al.</i> (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> <li>Wang, Y.S. <i>et al.</i> (2007) Characterization of canine monocyte-derived dendritic cells with phenotypic and functional differentiation. <a href="#">Can J Vet Res. 71: 165-74.</a></li> <li>Huang, Y.C. <i>et al.</i> (2008) CD5-low expression lymphocytes in canine peripheral blood</li> </ol>

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**Storage** 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. This product is photosensitive and should be protected from light.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1781A647>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA928A647\)](#)

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