

## Datasheet: MCA1195PE

**BATCH NUMBER INN1603**

<b>Description:</b>	MOUSE ANTI HUMAN CD21:RPE
<b>Specificity:</b>	CD21
<b>Other names:</b>	CR2
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	LB21
<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	▪			Neat - 1/5

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.

### Target Species

Human

### Species Cross Reactivity

Reacts with: Sheep, Mink, Bovine, Goat, Cat

**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

### Preparation

Purified IgG prepared by ion exchange chromatography

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide 1% Bovine Serum Albumin
<b>Immunogen</b>	Human IM9 cell line.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P20023</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">1380</a>    CR2    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	C3DR
<b>RRID</b>	AB_321348
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse Sp2/0 myeloma cell line.
<b>Specificity</b>	<b>Mouse anti Human CD21 antibody, clone LB21</b> recognizes the human Complement receptor type 2, also known as CD21 or the Epstein-Barr virus receptor. CD21 is a ~14 kDa cell surface glycoprotein expressed by mature B cells and by follicular dendritic cells. The molecule acts as a receptor for complement components C3d, C3dg and iC3b, as well as for Epstein Barr Virus. It forms part of a large signal transduction complex in association with CD19.
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells or 100ul whole blood
<b>References</b>	<ol style="list-style-type: none"> <li>1. Furukawa, Y. <i>et al.</i> (2000) Frequent reversible membrane damage in peripheral blood B cells in human T cell lymphotropic virus type I (HTLV-I)-associated myelopathy/tropical spastic paraparesis (HAM/TSP). <a href="#">Clin Exp Immunol. 120 (2): 307-16.</a></li> <li>2. Griebel, P.J. <i>et al.</i> (2007) Cross-reactivity of mAbs to human CD antigens with sheep leukocytes. <a href="#">Vet Immunol Immunopathol. 119: 115-22.</a></li> <li>3. Aasted, B. <i>et al.</i> (2007) Reactivity of monoclonal antibodies to human CD antigens with cells from mink. <a href="#">Vet Immunol Immunopathol. 119: 27-37.</a></li> <li>4. Sopp, P. <i>et al.</i> (2007) Cross-reactivity of mAbs to human CD antigens with cells from cattle. <a href="#">Vet Immunol Immunopathol. 119: 106-14.</a></li> <li>5. Davis, W.C. <i>et al.</i> (2007) Use of flow cytometry to identify monoclonal antibodies that recognize conserved epitopes on orthologous leukocyte differentiation antigens in goats, llamas, and rabbits. <a href="#">Vet Immunol Immunopathol. 119: 123-30.</a></li> <li>6. Aichele, A. <i>et al.</i> (2006) Redox regulation of CD21 shedding involves signaling via PKC and indicates the formation of a juxtamembrane stalk. <a href="#">J Cell Sci. 119: 2892-902.</a></li> <li>7. Angel, C.E. <i>et al.</i> (2009) Distinctive localization of antigen-presenting cells in human lymph nodes. <a href="#">Blood. 113: 1257-67.</a></li> <li>8. Sengstake, S. <i>et al.</i> (2006) CD21 and CD62L shedding are both inducible via P2X7Rs. <a href="#">Int Immunol. 18: 1171-8.</a></li> </ol>

9. Clutterbuck, E.A. *et al.* (2012) Pneumococcal conjugate and plain polysaccharide vaccines have divergent effects on antigen-specific B cells. [J Infect Dis. 205: 1408-16.](#)
10. Meister, R.K. *et al.* (2007) Progress in the discovery and definition of monoclonal antibodies for use in feline research. [Vet Immunol Immunopathol. 119: 38-46.](#)
11. Damgaard, B.M. *et al.* (2012) The effects of feed restriction on physical activity, body weight, physiology, haematology and immunology in female mink. [Res Vet Sci. 93: 936-42.](#)
12. Stachowiak, B. & Weingartl, H.M. (2012) Nipah virus infects specific subsets of porcine peripheral blood mononuclear cells. [PLoS One. 7 \(1\): e30855.](#)

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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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #20487 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1195PE>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

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

### Recommended Useful Reagents

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

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

<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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Printed on 20 Mar 2024