

## Datasheet: MCA1195F

**BATCH NUMBER 0415**

<b>Description:</b>	MOUSE ANTI HUMAN CD21:FITC
<b>Specificity:</b>	CD21
<b>Other names:</b>	CR2
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	LB21
<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	▪			Neat - 1/10

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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525

### Preparation

Purified IgG prepared by ion exchange chromatography

### Buffer Solution

Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.09% Sodium Azide 1% Bovine Serum Albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml
<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_321347
<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>	<p><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.</p>
<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.</li> </ol>

[Int Immunol. 18: 1171-8.](#)

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**

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifuging 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 #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1195F>  
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**Regulatory**

For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

### Recommended Useful Reagents

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

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

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