

Datasheet: MCA1195PET

Description:	MOUSE ANTI HUMAN CD21:RPE
Specificity:	CD21
Other names:	CR2
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	LB21
Isotype:	IgG1
Quantity:	25 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.

	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 in 0.25 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 from ascites

Buffer Solution	Phosphate buffered saline
Preservative	0.09% sodium azide (NaN ₃)
Stabilisers	1% bovine serum albumin
Immunogen	Human IM9 cell line.
External Database Links	<p>UniProt: P20023 Related reagents</p> <p>Entrez Gene: 1380 CR2 Related reagents</p>
Synonyms	C3DR
RRID	AB_2245366
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse Sp2/0 myeloma cell line.
Specificity	Mouse anti Human CD21 antibody, clone LB21 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.
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells or 100µl whole blood
References	<ol style="list-style-type: none"> 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). Clin Exp Immunol. 120 (2): 307-16. 2. Aichele, A. <i>et al.</i> (2006) Redox regulation of CD21 shedding involves signaling via PKC and indicates the formation of a juxtamembrane stalk. J Cell Sci. 119: 2892-902. 3. Sengstake, S. <i>et al.</i> (2006) CD21 and CD62L shedding are both inducible via P2X7Rs. Int Immunol. 18: 1171-8. 4. Griebel, P.J. <i>et al.</i> (2007) Cross-reactivity of mAbs to human CD antigens with sheep leukocytes. Vet Immunol Immunopathol. 119: 115-22. 5. Aasted, B. <i>et al.</i> (2007) Reactivity of monoclonal antibodies to human CD antigens with cells from mink. Vet Immunol Immunopathol. 119: 27-37. 6. Sopp, P. <i>et al.</i> (2007) Cross-reactivity of mAbs to human CD antigens with cells from cattle. Vet Immunol Immunopathol. 119: 106-14. 7. 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. Vet Immunol Immunopathol. 119: 123-30. 8. Angel, C.E. <i>et al.</i> (2009) Distinctive localization of antigen-presenting cells in human lymph nodes. Blood. 113: 1257-67.

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13. Pooley, H.B. *et al.* (2022) Sheep vaccinated against paratuberculosis have increased levels of B cells infiltrating the intestinal tissue. [Vet Immunol Immunopathol. 252: 110482.](#)

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/MCA1195PET> 20487

Regulatory For research purposes only

Related Products

Recommended Negative Controls

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

Recommended Useful Reagents

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

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

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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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