

Datasheet: MCA1195PE

Description:	MOUSE ANTI HUMAN CD21:RPE		
Specificity:	CD21		
Other names:	CR2		
Format:	RPE		
Product Type:	Monoclonal Antibody		
Clone:	LB21		
Isotype:	lgG1		
Quantity:	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.

	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	Reacts with: Sheep	, Mink, Bovine, Goat, Ca	at
Reactivity	reactivity is derived	from testing within our le	ons may vary between species. Cross aboratories, peer-reviewed publications ors. Please refer to references indicated
Product Form	Purified IgG conjuga	ated to R. Phycoerythrin	(RPE) - lyophilized
Reconstitution	Reconstitute with 1	ml distilled water	
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
		496	578

Buffer Solution	Phosphate buffered saline	
Preservative Stabilisers	0.09% sodium azide (NaN ₃) 1% bovine serum albumin 5% sucrose	
Immunogen	Human IM9 cell line.	
External Database Links	UniProt: P20023 Related reagents Entrez Gene: 1380 CR2 Related reagents	
Synonyms	C3DR	
RRID	AB_321348	
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	 Furukawa, Y. et al. (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. Aichem, A. et al. (2006) Redox regulation of CD21 shedding involves signaling via PKC and indicates the formation of a juxtamembrane stalk. J Cell Sci. 119: 2892-902. Sengstake, S. et al. (2006) CD21 and CD62L shedding are both inducible via P2X7Rs. Int Immunol. 18: 1171-8. Griebel, P.J. et al. (2007) Cross-reactivity of mAbs to human CD antigens with sheep leukocytes. Vet Immunol Immunopathol. 119: 115-22. Aasted, B. et al. (2007) Reactivity of monoclonal antibodies to human CD antigens with cells from mink. Vet Immunol Immunopathol. 119: 27-37. Sopp, P. et al. (2007) Cross-reactivity of mAbs to human CD antigens with cells from cattle. Vet Immunol Immunopathol. 119: 106-14. Davis, W.C. et al. (2007) Use of flow cytometry to identify monoclonal antibodies that 	

recognize conserved epitopes on orthologous leukocyte differentiation antigens in goats,

8. Angel, C.E. et al. (2009) Distinctive localization of antigen-presenting cells in human

llamas, and rabbits. Vet Immunol Immunopathol. 119: 123-30.

lymph nodes. Blood. 113: 1257-67.

- 9. 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.
- 10. 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.
- 11. Damgaard, B.M. *et al.* (2012) The effects of feed restriction on physical activity, body weight, physiology, haematology and immunology in female mink. <u>Res Vet Sci. 93:</u> 936-42.
- 12. Stachowiak, B. & Weingartl, H.M. (2012) Nipah virus infects specific subsets of porcine peripheral blood mononuclear cells. <u>PLoS One. 7 (1): e30855.</u>
- 13. Pooley, H.B. *et al.* (2022) Sheep vaccinated against paratuberculosis have increased levels of B cells infiltrating the intestinal tissue. <u>Vet Immunol Immunopathol. 252: 110482.</u>

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/MCA1195PE 20487
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:RPE (MCA928PE)

Email: antibody_sales_us@bio-rad.com

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

Fax: +1 919 878 3751

North & South Tel: +1 800 265 7376

America

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_uk@bio-rad.com

Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M436999:250307'

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