

Datasheet: MCA1195

Description:	MOUSE ANTI HUMAN CD21
Specificity:	CD21
Other names:	CR2
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	LB21
Isotype:	IgG1
Quantity:	2 ml

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
Immunohistology - Frozen (1)	▪			1/10 - 1/100
Immunohistology - Paraffin		▪		
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	
Immunofluorescence	▪			

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.

(1)The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.

Target Species	Human
Species Cross Reactivity	<p>Reacts with: Sheep, Mink, Bovine, Goat, Cat</p> <p>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.</p>

Product Form	Purified IgG - liquid
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
Approx. Protein Concentrations	IgG concentration 25 ug/ml
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_321346
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 human whole blood
Histology Positive Control Tissue	Lymph node
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. *et al.* (2007) Reactivity of monoclonal antibodies to human CD antigens with cells from mink. [Vet Immunol Immunopathol. 119: 27-37.](#)
6. Sopp, P. *et al.* (2007) Cross-reactivity of mAbs to human CD antigens with cells from cattle. [Vet Immunol Immunopathol. 119: 106-14.](#)
7. 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, llamas, and rabbits. [Vet Immunol Immunopathol. 119: 123-30.](#)
8. Angel, C.E. *et al.* (2009) Distinctive localization of antigen-presenting cells in human 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. [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.](#)
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 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.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1195>
10041

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

- Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
- Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)
- Goat Anti Mouse IgG (STAR76...) [RPE](#)
- Goat Anti Mouse IgG (STAR70...) [FITC](#)
- Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@550](#), [DyLight@650](#), [DyLight@680](#), [DyLight@800](#), [FITC](#), [HRP](#)
- Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

Goat Anti Mouse IgG (STAR77...) [HRP](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 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
'M429161:240320'

Printed on 20 Mar 2024

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)