

Datasheet: MCA1076PB

### **BATCH NUMBER 167504**

Description:	MOUSE ANTI HUMAN CD62L:Pacific Blue®
Specificity:	CD62L
Other names:	LECAM-1, L-SELECTIN
Format:	Pacific Blue®
Product Type:	Monoclonal Antibody
Clone:	FMC46
Isotype:	lgG2b
Quantity:	100 TESTS/1ml

# **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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	-			Neat

Where this product 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 product for use in their own system using appropriate negative/positive controls.

Species Cross
B
Reactivity

**Target Species** 

Reacts with: Bovine, Cynomolgus monkey, Rhesus Monkey, Dog

**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 IgC conjugated to Pacific Plus Liqui	ıiА
Product Form	Purified IgG conjugated to Pacific Blue - liqu	лa

Human

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Pacific Blue®	410	455

### Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN <sub>3</sub> ) 1% bovine serum albumin
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml
Immunogen	PHA stimulated lymphoblasts
External Database Links	UniProt:  P14151 Related reagents  Entrez Gene:  6402 SELL Related reagents
Synonyms	LNHR, LYAM1
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse NS1 myeloma cell line
Specificity	Mouse anti Human CD62L antibody, clone FMC46 recognizes human CD62L, also known a L-selectin, a 74-95 kDa member of the selectin family of adhesion receptors, which acts as a ligand for both CD62P (P-selectin) and CD62E (E-selectin). Human CD62L is constitutively expressed on most leucocytes including monocytes, granulocytes lymphocytes, NK cells, bone marrow myeloid progenitor cells and on a subset of thymocytes.
	CD62L plays an important role in leucocyte tethering and rolling on the endothelial cell surface and for the homing of naïve lymphocytes to lymph nodes and Peyers patches via HEV. Neutrophils require a constant supply of this molecule on the cell surface for migration into peripheral tissues and adhesion to activated endothelium at sites of inflammation, where CD62L is rapidly shed as soluble L-selectin, but surface expression still remains.
	The expression of CD62L is down regulated on lymphocytes and neutrophils by PMA stimulation.
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells or 100ul whole blood
References	<ol> <li>Zola, H. <i>et al.</i> (1991) The expression of sub-population markers on B cells: a re-evaluation using high-sensitivity fluorescence flow cytometry. <u>Dis Markers. 9 (2): 103-18.</u></li> <li>Sopp, P. &amp; Howard, C.J. (1997) Cross-reactivity of monoclonal antibodies to defined human leucocyte differentiation antigens with bovine cells. <u>Vet Immunol Immunopathol. 56 (1-2): 11-25.</u></li> <li>Haanstra, K.G. <i>et al.</i> (2008) Characterization of naturally occurring CD4+CD25+</li> </ol>

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- 6. Hughes, S.F. *et al.* (2010) Total hip and knee replacement surgery results in changes in leukocyte and endothelial markers. <u>J Inflamm (Lond)</u>. 7:2.
- 7. Bismarck, D. *et al.* (2012) Canine CD4+CD8+ double positive T cells in peripheral blood have features of activated T cells. Vet Immunol Immunopathol. 149: 157-66.
- 8. Hartley, A.N. & Tarleton, R.L. (2015) Chemokine receptor 7 (CCR7)-expression and IFNγ production define vaccine-specific canine T-cell subsets. <u>Vet Immunol Immunopathol.</u> 164 (3-4): 127-36.
- 9. Hayhoe, R.P. *et al.* (2006) Annexin 1 and its bioactive peptide inhibit neutrophilendothelium interactions under flow: indication of distinct receptor involvement. <u>Blood. 107</u> (5): 2123-30.
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- 11. Aspinall, A.I. *et al.* (2010) CX(3)CR1 and vascular adhesion protein-1-dependent recruitment of CD16(+) monocytes across human liver sinusoidal endothelium. Hepatology. 51 (6): 2030-9.
- 12. Rothe, K. *et al.* (2017) Canine peripheral blood CD4<sup>+</sup>CD8<sup>+</sup> double-positive Tcell subpopulations exhibit distinct Tcell phenotypes and effector functions. <u>Vet Immunol Immunopathol. 185: 48-56.</u>
- 13. Withers, S.S. *et al.* (2018) Multi-color flow cytometry for evaluating age-related changes in memory lymphocyte subsets in dogs. <u>Dev Comp Immunol. 87: 64-74.</u>
- 14. Hughes, S.F. *et al.* (2020) The role of phagocytic leukocytes following flexible ureterenoscopy, for the treatment of kidney stones: an observational, clinical pilots-study. <u>Eur J Med Res. 25 (1): 68.</u>
- 15. Svitek, N. *et al.* (2018) An Ad/MVA vectored *Theileria parva* antigen induces schizont-specific CD8<sup>+</sup> central memory T cells and confers partial protection against a lethal challenge. NPJ Vaccines. 3: 35.
- 16. Tucker, N. *et al.* (2023) Bovine blood and milk T-cell subsets in distinct states of activation and differentiation during subclinical *Staphylococcus aureus* mastitis. <u>J Reprod Immunol</u>. 156: 103826.
- 17. Yamauchi, A. *et al.* (2023) Negative Influence of Aging on Differentiation and Proliferation of CD8(+) T-Cells in Dogs. Vet Sci. 10 (9): 541

# 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. This product is photosensitive and should be protected from light.

#### Guarantee

12 months from date of despatch

#### **Acknowledgements**

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Health And Safety Information

Material Safety Datasheet documentation #10041 available at:

https://www.bio-rad-antibodies.com/SDS/MCA1076PB

10041

Regulatory

For research purposes only

## Related Products

## **Recommended Negative Controls**

MOUSE IgG2b NEGATIVE CONTROL:Pacific Blue® (MCA691PB)

### **Recommended Useful Reagents**

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & South Tel: +1 800 265 7376 America Fax: +1 919 878 3751

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\_us@bio-rad.com

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 'M408021:221010'

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