

Datasheet: MCA1649G

Description:	MOUSE ANTI BOVINE CD62L
Specificity:	CD62L
Other names:	LECAM-1, L-SELECTIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	CC32
Isotype:	IgG1
Quantity:	0.25 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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/50 - 1/100
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	

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	Bovine
Species Cross Reactivity	Reacts with: Sheep N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml

Immunogen	Bovine lymphocytes
External Database Links	<p>UniProt: P98131 Related reagents</p> <p>Entrez Gene: 281485 SELL Related reagents</p>
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the NS1 myeloma cell line.
Specificity	<p>Mouse anti Bovine CD62L antibody, clone CC32 recognizes bovine L-selectin, also known as CD62L, Leukocyte-endothelial cell adhesion molecule 1, LECAM-1 or Lymph node homing receptor. Bovine CD62L is a 370 amino acid ~90 kDa, single pass type I transmembrane glycoprotein bearing a single C-type lectin domain, an EGF-like domain and two Sushi domains (UniProt: P98131).</p> <p>Immunoprecipitation of peripheral blood mononuclear cell lysates with Mouse anti Bovine CD62L antibody, clone CC32 reveals a molecule of ~90 kDa when run on polyacrylamide gels under reducing conditions, slightly larger than the murine and human CD62L homologues. Bovine CD62L is expressed on subpopulations of T-lymphocytes expressing CD2, CD4 and CD8. WC1 positive γ/δ T cells also express CD62L as do a subpopulation of WC3^{+ve} B-lymphocytes and all peripheral blood monocytes (Howard et al. 1992).</p> <p>Mouse anti Bovine CD62L antibody, clone CC32 has also been used successfully for the identification of CD62L on ovine peripheral blood cells by flow cytometry (Halliday et al. 2005).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> Sopp, P. & Howard, C.J. (2001) IFN gamma and IL-4 production by CD4, CD8 and WC1 gamma delta TCR(+) T cells from cattle lymph nodes and blood. Vet Immunol Immunopathol. 81 (1-2): 85-96. Toka, F.N. et al. (2011) Rapid and Transient Activation of $\{\gamma\}\{\delta\}$ T Cells to IFN-$\{\gamma\}$ Production, NK Cell-Like Killing, and Antigen Processing during Acute Virus Infection. J Immunol. 186: 4853-61. Vesosky, B. et al. (2003) Activation marker expression on bovine peripheral blood gammadelta T cells during post-natal development and following vaccination with a commercial polyvalent viral vaccine. Dev Comp Immunol. 27: 439-47. Edwards, J.C. et al. (2010) PrP^(Sc) is associated with B cells in the blood of scrapie-infected sheep. Virology. 405: 110-9. Glew, E.J. et al. (2003) Differential effects of bovine viral diarrhoea virus on monocytes and dendritic cells. J Gen Virol. 84: 1771-80. Vrieling M et al. (2012) $\gamma\delta$ T cell homing to skin and migration to skin-draining lymph nodes is CCR7 independent. J Immunol. 188 (2): 578-84. Brackenbury, L.S. et al. (2005) Identification of a cell population that produces alpha/beta interferon <i>in vitro</i> and <i>in vivo</i> in response to noncytopathic bovine viral diarrhea virus. J Virol. 79: 7738-44. Whelan, A.O. et al. (2011) Development of an Antibody to Bovine IL-2 Reveals Multifunctional CD4 T(EM) Cells in Cattle Naturally Infected with Bovine Tuberculosis. PLoS One. 6: e29194. Riollet, C. et al. (2001) Cell subpopulations and cytokine expression in cow milk in response to chronic <i>Staphylococcus aureus</i> infection. J Dairy Sci. 84: 1077-84. Ozawa, T. et al. (2011) Effect of intramammary infusion of rbGM-CSF on SCC and expression

of polymorphonuclear neutrophil adhesion molecules in subclinical mastitis cows. [Vet Res Commun. 36: 21-7.](#)

11. Silvestre, F.T. *et al.* (2011) Effects of differential supplementation of fatty acids during the peripartum and breeding periods of Holstein cows: II. Neutrophil fatty acids and function, and acute phase proteins. [J Dairy Sci. 94: 2285-301.](#)

12. Halliday, S. *et al.* (2005) Expression of PrPC on cellular components of sheep blood. [J Gen Virol. 86: 1571-9.](#)

13. Blunt, L. *et al.* (2015) Phenotypic characterization of bovine memory cells responding to mycobacteria in IFN γ enzyme linked immunospot assays [Vaccine. Oct 27 \[Epub ahead of print\]](#)

14. Hussen, J. *et al.* (2016) Neutrophil degranulation differentially modulates phenotype and function of bovine monocyte subsets. [Innate Immun. 22 \(2\): 124-37.](#)

15. Chen, X. *et al.* (2016) Bovine P-selectin mediates leukocyte adhesion and is highly polymorphic in dairy breeds. [Res Vet Sci. 108: 85-92.](#)

16. Jimbo, S. *et al.* (2017) Effect of *Mycoplasma bovis* on bovine neutrophils. [Vet Immunol Immunopathol. 188: 27-33.](#)

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

This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life 18 months from date of despatch.

Health And Safety Information Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

- Goat Anti Mouse IgG (STAR76...) [RPE](#)
- Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
- Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@549](#), [DyLight@649](#), [DyLight@680](#), [DyLight@800](#), [FITC](#), [HRP](#)
- Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
- Goat Anti Mouse IgG (STAR77...) [HRP](#)
- Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
- Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
- Rabbit Anti Mouse IgG (STAR8...) [DyLight@800](#)
- Goat Anti Mouse IgG (STAR70...) [FITC](#)
- Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
- Human Anti Mouse IgG1 (HCA036...) [HRP](#)

Recommended Negative Controls

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

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