

Datasheet: MCA1649F

Description:	MOUSE ANTI BOVINE CD62L:FITC
Specificity:	CD62L
Other names:	LECAM-1, L-SELECTIN
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	CC32
Isotype:	IgG1
Quantity:	0.1 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	▪			Neat - 1/10

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.

Target Species

Bovine

Species Cross Reactivity

Reacts with: Sheep

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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525

Preparation

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

Buffer Solution

Phosphate buffered saline

Preservative	0.09% sodium azide (NaN ₃)
Stabilisers	1% bovine serum albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	Bovine lymphocytes
External Database Links	<p>UniProt:</p> <p>P98131 Related reagents</p> <p>Entrez Gene:</p> <p>281485 SELL Related reagents</p>
RRID	AB_905968
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.</p> <p>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). 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 <i>et al.</i> 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 <i>et al.</i> 2005).</p>
Flow Cytometry	Use 10 μ l of the suggested working dilution to label 10 ⁶ cells in 100 μ l
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. Riollet, C. <i>et al.</i> (2001) Cell subpopulations and cytokine expression in cow milk in response to chronic <i>Staphylococcus aureus</i> infection. J Dairy Sci. 84: 1077-84. Vesosky, B. <i>et al.</i> (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.

4. Glew, E.J. *et al.* (2003) Differential effects of bovine viral diarrhoea virus on monocytes and dendritic cells. [J Gen Virol. 84: 1771-80.](#)
 5. Halliday, S. *et al.* (2005) Expression of PrPC on cellular components of sheep blood. [J Gen Virol. 86: 1571-9.](#)
 6. Brackenbury, L.S. *et al.* (2005) Identification of a cell population that produces alpha/beta interferon *in vitro* and *in vivo* in response to noncytopathic bovine viral diarrhea virus. [J Virol. 79: 7738-44.](#)
 7. Edwards, J.C. *et al.* (2010) PrP^(Sc) is associated with B cells in the blood of scrapie-infected sheep. [Virology. 405: 110-9.](#)
 8. 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.](#)
 9. 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.](#)
 10. Toka, F.N. *et al.* (2011) Rapid and Transient Activation of {gamma}{delta} T Cells to IFN-γ Production, NK Cell-Like Killing, and Antigen Processing during Acute Virus Infection. [J Immunol. 186: 4853-61.](#)
 11. 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.](#)
 12. Vrieling M *et al.* (2012) γδ T cell homing to skin and migration to skin-draining lymph nodes is CCR7 independent. [J Immunol. 188 \(2\): 578-84.](#)
 13. Blunt, L. *et al.* (2015) Phenotypic characterization of bovine memory cells responding to mycobacteria in IFNγ enzyme linked immunospot assays. [Vaccine. 33 \(51\): 7276-82.](#)
 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.](#)
 17. Hamilton, C.A. *et al.* (2017) Frequency and phenotype of natural killer cells and natural killer cell subsets in bovine lymphoid compartments and blood. [Immunology. 151 \(1\): 89-97.](#)
 18. Souza, F.N. *et al.* (2020) Immune response in nonspecific mastitis: What can it tell us? [J Dairy Sci. 103 \(6\): 5376-86.](#)
 19. Fiorenza, M.F. *et al.* (2021) Neutrophils recognize and amplify IFNT signals derived from day 7 bovine embryo for stimulation of ISGs expression *in vitro*: A possible implication for the early maternal recognition of pregnancy. [Biochem Biophys Res Commun. 553: 37-43.](#)
 20. Martin, C.C. *et al.* (2021) Effect of prophylactic use of tulathromycin on gut bacterial populations, inflammatory profile and diarrhea in newborn Holstein calves. [Res Vet Sci. 136: 268-76.](#)
 21. Hong, S. *et al.* (2024) Impact of an Injectable Trace Mineral Supplement on the Immune Response and Outcome of *Mannheimia haemolytica* Infection in Feedlot Cattle. [Biol Trace Elem Res. Jun 10 \[Epub ahead of print\].](#)
-

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
------------------	---------------------------------

Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1649F10041
--------------------------------------	---

Regulatory	For research purposes only
-------------------	----------------------------

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

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
'M437880:250319'

Printed on 23 May 2025