

Datasheet: MCA1649G

BATCH NUMBER 152387

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	<p>Reacts with: Sheep</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 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

UniProt:

[P98131](#) [Related reagents](#)

Entrez Gene:

[281485](#) SELL [Related reagents](#)

RRID AB_905969

Fusion Partners Spleen cells from immunised BALB/c mice were fused with cells of the NS1 myeloma cell line.

Specificity **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](#)).

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](#)).

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](#)).

Flow Cytometry Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

References

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- IFN- γ Production, NK Cell-Like Killing, and Antigen Processing during Acute Virus Infection. [J Immunol. 186: 4853-61.](#)
3. 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.](#)
 4. Edwards, J.C. *et al.* (2010) PrP^(Sc) is associated with B cells in the blood of scrapie-infected sheep. [Virology. 405: 110-9.](#)
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 6. 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.](#)
 7. 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.](#)
 8. 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.](#)
 9. Riollet, C. *et al.* (2001) Cell subpopulations and cytokine expression in cow milk in response to chronic *Staphylococcus aureus* infection. [J Dairy Sci. 84: 1077-84.](#)
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 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. 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.](#)

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.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1649G 10040
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
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight@488 , DyLight@550 , DyLight@650 , DyLight@680 , DyLight@800 , FITC , 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
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'M365569:200529'

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