

Datasheet: MCA2538A647

BATCH NUMBER 154719

Description:	MOUSE ANTI HUMAN CD79a:Alexa Fluor® 647
Specificity:	CD79a
Other names:	MB-1
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	HM57
Isotype:	IgG1
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 www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry (1)	▪			1/5 - 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.

(1)Membrane permeabilisation is required for this application. Bio-Rad recommends the use of Leucoperm™ (Product Code [BUF09](#)) for this purpose.

Target Species

Human

Species Cross Reactivity

Reacts with: Mouse, Rabbit, Horse, Pig, Monkey, Rat, Bovine, Guinea Pig, Fallow deer, American Bison, Red deer, Ferret, Goat

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 Alexa Fluor® 647 - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®647	650	665

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 ₃) 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.05mg/ml
Immunogen	Synthetic peptide corresponding to 202-216 amino acid sequence of human mb-1
External Database Links	<p>UniProt: P11912 Related reagents</p> <p>Entrez Gene: 973 CD79A Related reagents</p>
Synonyms	IGA, MB1
RRID	AB_905977
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the Sp2/0 myeloma cell line
Specificity	<p>Mouse anti Human CD79a antibody, clone HM57 recognizes an epitope within the cytoplasmic domain of CD79a. CD79a, also known as mb-1, is a 45 kDa protein that is expressed by B lymphocytes during differentiation from early pre-B cell stage through to plasma cells.</p> <p>The CD79a molecule associates with CD79b (B29) to form a heterodimer that is non-covalently linked to surface immunoglobulin, forming the B-cell receptor (BCR) complex. The CD79a/CD79b heterodimers are also necessary for intracellular signaling following antigen-binding to surface immunoglobulin.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> Mason, D.Y. <i>et al.</i> (1991) The IgM-associated protein mb-1 as a marker of normal and neoplastic B cells. J Immunol. 147 (11): 2474-82. Jones, M. <i>et al.</i> (1993) Detection of T and B cells in many animal species using cross-reactive anti-peptide antibodies. J Immunol. 150 (12): 5429-35. Christgau, M. <i>et al.</i> (1998) Characterization of immunocompetent cells in the diseased canine periodontium. J Histochem Cytochem. 46: 1443-54. Spaas, J.H. <i>et al.</i> (2013) Culture and characterisation of equine peripheral blood mesenchymal stromal cells. Vet J. 195 (1): 107-13. Nelson, D.D. <i>et al.</i> (2010) CD8(+)/perforin(+)/WC1(-) gammadelta T cells, not CD8(+)

- alphabeta T cells, infiltrate vasculitis lesions of American bison (*Bison bison*) with experimental sheep-associated malignant catarrhal fever. [Vet Immunol Immunopathol. 136: 284-91.](#)
6. De Schauwer, C. *et al.* (2012) In search for cross-reactivity to immunophenotype equine mesenchymal stromal cells by multicolor flow cytometry. [Cytometry A. 81 \(4\): 312-23.](#)
7. Long, H. *et al.* (2016) Polyostotic Lymphoma in a Ferret (*Mustela putorius furo*). [J Comp Pathol. 154 \(4\): 341-4.](#)
8. Schinköthe J *et al.* (2016) Characterization of tuberculous granulomas in different stages of progression and associated tertiary lymphoid tissue in goats experimentally infected with *Mycobacterium avium* subsp. *hominissuis*. [Comp Immunol Microbiol Infect Dis. 47: 41-51.](#)
9. Bozkurt, Y.A., *et al.* (2014) Histological and immunohistological studies of the structure of lymph nodes in Kilis goats. [Biotech Histochem. 89\(6\):440-5.](#)
10. Froment R & Bédard C (2016) Marked hyperphosphatasemia associated with an acute leukemia in a Great Dane. [Vet Clin Pathol. Aug 18. \[Epub ahead of print\]](#)
11. Aresu, L. *et al.* (2015) Canine indolent and aggressive lymphoma: clinical spectrum with histologic correlation. [Vet Comp Oncol. 13 \(4\): 348-62.](#)
12. Poggi, A. *et al.* (2015) Flow cytometric evaluation of ki67 for the determination of malignancy grade in canine lymphoma. [Vet Comp Oncol. 13 \(4\): 475-80.](#)
13. Gelain ME *et al.* (2014) CD44 in canine leukemia: analysis of mRNA and protein expression in peripheral blood. [Vet Immunol Immunopathol. 159 \(1-2\): 91-6.](#)
14. Paebst, F. *et al.* (2014) Comparative immunophenotyping of equine multipotent mesenchymal stromal cells: an approach toward a standardized definition. [Cytometry A. 85 \(8\): 678-87.](#)
15. De Schauwer, C. *et al.* (2014) Characterization and profiling of immunomodulatory genes of equine mesenchymal stromal cells from non-invasive sources. [Stem Cell Res Ther. 5 \(1\): 6.](#)
16. Claessen, C. *et al.* (2015) Equid herpesvirus 1 (EHV1) infection of equine mesenchymal stem cells induces a pUL56-dependent downregulation of select cell surface markers. [Vet Microbiol. 176 \(1-2\): 32-9.](#)
17. Novacco, M. *et al.* (2015) Prognostic factors in canine acute leukaemias: a retrospective study. [Vet Comp Oncol. Jan 26. \[Epub ahead of print\]](#)
18. Hillmann, A. *et al.* (2016) Comparative Characterization of Human and Equine Mesenchymal Stromal Cells: A Basis for Translational Studies in the Equine Model. [Cell Transplant. 25 \(1\): 109-24.](#)
19. Moore, P.F. *et al.* (2013) Canine inflamed nonepitheliotropic cutaneous T-cell lymphoma: a diagnostic conundrum. [Vet Dermatol. 24 \(1\): 204-11.e44-5.](#)
20. Nagata, K. *et al.* (2017) Epstein-Barr Virus Lytic Reactivation Activates B Cells Polyclonally and Induces Activation-Induced Cytidine Deaminase Expression: A Mechanism Underlying Autoimmunity and Its Contribution to Graves' Disease. [Viral Immunol. Mar 23. \[Epub ahead of print\]](#)
21. Wessels, M. *et al.* (2017) Systemic necrotizing polyarteritis in three weaned lambs from one flock. [J Vet Diagn Invest. May 1:1040638717709856. \[Epub ahead of print\]](#)
22. Uitterdijk, A. *et al.* (2017) Time course of VCAM-1 expression in reperfused myocardial infarction in swine and its relation to retention of intracoronary administered bone marrow-derived mononuclear cells. [PLoS One. 12 \(6\): e0178779.](#)

Further Reading 1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. [Vet Res. 39: 54.](#)

Storage Store at +4°C or at -20°C if preferred.
Storage in frost-free freezers is not recommended.
This product should be stored undiluted. This product is photosensitive and should be protected from light.
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

Acknowledgements This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com

Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2538A647>
10041

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA928A647\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

North & South Tel: +1 800 265 7376

America 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](https://www.bio-rad-antibodies.com/datasheets)

'M367141:200529'

Printed on 08 Mar 2024