

Datasheet: MCA2538PE

Description:	MOUSE ANTI HUMAN CD79a:RPE
Specificity:	CD79a
Other names:	MB-1
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	HM57
Isotype:	IgG1
Quantity:	100 TESTS

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)	■			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.

(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, Dog, Rabbit, Horse, Pig, Monkey, Rat, Bovine, Chicken, Guinea Pig, Fallow deer, American Bison, Red deer, Ferret, Goat N.B. Antibody reactivity and working conditions may vary between species.		
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
Reconstitution	Reconstitute with 1ml distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
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	
	5%	Sucrose	

Immunogen	Synthetic peptide corresponding to 202-216 amino acid sequence of human mb-1
External Database Links	UniProt: P11912 Related reagents Entrez Gene: 973 CD79A Related reagents
Synonyms	IGA, MB1
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the Sp2/0 myeloma cell line
Specificity	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. 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.
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul.
References	1. 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. 2. 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. 3. Christgau, M. <i>et al.</i> (1998) Characterization of immunocompetent cells in the diseased canine periodontium. J Histochem Cytochem. 46: 1443-54. 4. Spaas, J.H. <i>et al.</i> (2013) Culture and characterisation of equine peripheral blood mesenchymal stromal cells. Vet J. 195 (1): 107-13. 5. Del Cacho, E. <i>et al.</i> (2009) Avian follicular and interdigitating dendritic cells: isolation and morphologic, phenotypic, and functional analyses. Vet Immunol Immunopathol. 129 (1-2): 66-75. 6. 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 (<i>Bison bison</i>) with experimental sheep-associated malignant catarrhal fever. Vet Immunol Immunopathol. 136: 284-91. 7. De Schauwer, C. <i>et al.</i> (2012) In search for cross-reactivity to immunophenotype equine mesenchymal stromal cells by multicolor flow cytometry. Cytometry A. 81 (4): 312-23. 8. Long, H. <i>et al.</i> (2016) Polyostotic Lymphoma in a Ferret (<i>Mustela putorius furo</i>). J Comp Pathol. 154 (4): 341-4. 9. Schinköthe J <i>et al.</i> (2016) Characterization of tuberculous granulomas in different stages of progression and associated tertiary lymphoid tissue in goats experimentally infected with <i>Mycobacterium avium</i> subsp. <i>hominissuis</i>. Comp Immunol Microbiol Infect Dis. 47: 41-51. 10. Bozkurt, Y.A., <i>et al.</i> (2014) Histological and immunohistological studies of the structure of lymph nodes in Kilis goats. Biotech Histochem. 89(6):440-5. 11. 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] 12. Aresu, L. <i>et al.</i> (2015) Canine indolent and aggressive lymphoma: clinical spectrum with histologic correlation. Vet Comp Oncol. 13 (4): 348-62. 13. Poggi, A. <i>et al.</i> (2015) Flow cytometric evaluation of ki67 for the determination of malignancy grade in canine lymphoma. Vet Comp Oncol. 13 (4): 475-80. 14. Gelain ME <i>et al.</i> (2014) CD44 in canine leukemia: analysis of mRNA and protein expression in

- peripheral blood. [Vet Immunol Immunopathol. 159 \(1-2\): 91-6.](#)
15. 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.](#)
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 18. Novacco, M. *et al.* (2015) Prognostic factors in canine acute leukaemias: a retrospective study. [Vet Comp Oncol. Jan 26. \[Epub ahead of print\]](#)
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 20. Moore, P.F. *et al.* (2013) Canine inflamed nonepitheliotropic cutaneous T-cell lymphoma: a diagnostic conundrum. [Vet Dermatol. 24 \(1\): 204-11.e44-5.](#)
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 23. 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. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life	18 months from date of reconstitution.
Health And Safety Information	Material Safety Datasheet documentation #10075 available at: 10075: https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

Recommended Useful Reagents

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

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

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