

## Datasheet: MCA2538PET

|                      |                            |
|----------------------|----------------------------|
| <b>Description:</b>  | MOUSE ANTI HUMAN CD79a:RPE |
| <b>Specificity:</b>  | CD79a                      |
| <b>Other names:</b>  | MB-1                       |
| <b>Format:</b>       | RPE                        |
| <b>Product Type:</b> | Monoclonal Antibody        |
| <b>Clone:</b>        | HM57                       |
| <b>Isotype:</b>      | IgG1                       |
| <b>Quantity:</b>     | 25 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](http://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.**

|                                 |  |                                   |                                 |
|---------------------------------|--|-----------------------------------|---------------------------------|
| <b>Target Species</b>           | Human  |                                   |                                 |
| <b>Species Cross Reactivity</b> | Reacts with: Mouse, Dog, Rabbit, Horse, Pig, Monkey, Rat, Bovine, Chicken, Guinea Pig, Fallow deer, American Bison, Red deer, Ferret, Goat<br><b>N.B.</b> Antibody reactivity and working conditions may vary between species. |                                   |                                 |
| <b>Product Form</b>             | Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized  |                                   |                                 |
| <b>Reconstitution</b>           | Reconstitute with 0.25ml distilled water   |                                   |                                 |
| <b>Max Ex/Em</b>                | <b>Fluorophore</b><br>RPE 488nm laser  | <b>Excitation Max (nm)</b><br>496 | <b>Emission Max (nm)</b><br>578 |
| <b>Preparation</b>              | Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant  |                                   |                                 |
| <b>Buffer Solution</b>          | Phosphate buffered saline  |                                   |                                 |
| <b>Preservative</b>             | 0.09% Sodium Azide (NaN <sub>3</sub> )   |                                   |                                 |
| <b>Stabilisers</b>              | 1% Bovine Serum Albumin<br>5% Sucrose  |                                   |                                 |

|                                |  |
|--------------------------------|--|
| <b>Immunogen</b>               | Synthetic peptide corresponding to 202-216 amino acid sequence of human mb-1   |
| <b>External Database Links</b> | <p><b>UniProt:</b><br/> <a href="#">P11912</a>   <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">973</a>   CD79A   <a href="#">Related reagents</a></p>   |
| <b>Synonyms</b>                | IGA, MB1   |
| <b>Fusion Partners</b>         | Spleen cells from immunised Balb/c mice were fused with cells of the Sp2/0 myeloma cell line   |
| <b>Specificity</b>             | <p><b>Mouse anti Human CD79a antibody, clone HM57</b> 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>   |
| <b>Flow Cytometry</b>          | Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.  |
| <b>References</b>              | <ol style="list-style-type: none"> <li>Mason, D.Y. <i>et al.</i> (1991) The IgM-associated protein mb-1 as a marker of normal and neoplastic B cells. <a href="#">J Immunol. 147 (11): 2474-82.</a></li> <li>Jones, M. <i>et al.</i> (1993) Detection of T and B cells in many animal species using cross-reactive anti-peptide antibodies. <a href="#">J Immunol. 150 (12): 5429-35.</a></li> <li>Christgau, M. <i>et al.</i> (1998) Characterization of immunocompetent cells in the diseased canine periodontium. <a href="#">J Histochem Cytochem. 46: 1443-54.</a></li> <li>Spaas, J.H. <i>et al.</i> (2013) Culture and characterisation of equine peripheral blood mesenchymal stromal cells. <a href="#">Vet J. 195 (1): 107-13.</a></li> <li>Del Cacho, E. <i>et al.</i> (2009) Avian follicular and interdigitating dendritic cells: isolation and morphologic, phenotypic, and functional analyses. <a href="#">Vet Immunol Immunopathol. 129 (1-2): 66-75.</a></li> <li>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. <a href="#">Vet Immunol Immunopathol. 136: 284-91.</a></li> <li>De Schauwer, C. <i>et al.</i> (2012) In search for cross-reactivity to immunophenotype equine mesenchymal stromal cells by multicolor flow cytometry. <a href="#">Cytometry A. 81 (4): 312-23.</a></li> <li>Long, H. <i>et al.</i> (2016) Polyostotic Lymphoma in a Ferret (<i>Mustela putorius furo</i>). <a href="#">J Comp Pathol. 154 (4): 341-4.</a></li> <li>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>. <a href="#">Comp Immunol Microbiol Infect Dis. 47: 41-51.</a></li> <li>Bozkurt, Y.A., <i>et al.</i> (2014) Histological and immunohistological studies of the structure of lymph nodes in Kilis goats. <a href="#">Biotech Histochem. 89(6):440-5.</a></li> <li>Froment R &amp; Bédard C (2016) Marked hyperphosphatasemia associated with an acute leukemia in a Great Dane. <a href="#">Vet Clin Pathol. Aug 18. [Epub ahead of print]</a></li> <li>Aresu, L. <i>et al.</i> (2015) Canine indolent and aggressive lymphoma: clinical spectrum with histologic correlation. <a href="#">Vet Comp Oncol. 13 (4): 348-62.</a></li> <li>Poggi, A. <i>et al.</i> (2015) Flow cytometric evaluation of ki67 for the determination of malignancy grade in canine lymphoma. <a href="#">Vet Comp Oncol. 13 (4): 475-80.</a></li> <li>Gelain ME <i>et al.</i> (2014) CD44 in canine leukemia: analysis of mRNA and protein expression in</li> </ol> |

- 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.](#)
16. 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.](#)
17. 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.](#)
18. Novacco, M. *et al.* (2015) Prognostic factors in canine acute leukaemias: a retrospective study. [Vet Comp Oncol. Jan 26. \[Epub ahead of print\]](#)
19. 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.](#)
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.](#)
21. 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. \[Epub ahead of print\]](#)
22. Wessels, M. *et al.* (2017) Systemic necrotizing polyarteritis in three weaned lambs from one flock. [J Vet Diagn Invest. May 1:1040638717709856. \[Epub ahead of print\]](#)
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.](#)

|                                      |   |
|--------------------------------------|---|
| <b>Further Reading</b>               | 1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. <a href="#">Vet Res. 39: 54.</a>  |
| <b>Storage</b>                       | Prior to reconstitution store at +4°C.<br>After reconstitution store at +4°C.<br>DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. |
| <b>Shelf Life</b>                    | 18 months from date of reconstitution.  |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10075 available at: 10075: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf</a>       |
| <b>Regulatory</b>                    | 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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