

Datasheet: MCA2538H

**BATCH NUMBER 1711**

<b>Description:</b>	MOUSE ANTI HUMAN CD79a
<b>Specificity:</b>	CD79a
<b>Other names:</b>	MB-1
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	HM57
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	1 ml

## 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)	▪			1/10 - 1/25
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (2)	▪			
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting	▪			

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.**

**(2)This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.**

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	<p>Reacts with: Mouse, Rabbit, Horse, Pig, Monkey, Rat, Bovine, Guinea Pig, Fallow deer, American Bison, Red deer, Ferret, Goat</p> <p><b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or</p>

personal communications from the originators. Please refer to references indicated for further information.

---

<b>Product Form</b>	Purified IgG - liquid
---------------------	-----------------------

---

<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 Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin
---------------------------------	---

---

<b>Approx. Protein Concentrations</b>	IgG concentration 0.1mg/ml
---------------------------------------	----------------------------

---

<b>Immunogen</b>	Synthetic peptide corresponding to 202-216 amino acid sequence of human mb-1
------------------	--

---

<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P11912</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">973</a> CD79A <a href="#">Related reagents</a>
--------------------------------	---

---

<b>Synonyms</b>	IGA, MB1
-----------------	----------

---

<b>RRID</b>	AB_905979
-------------	-----------

---

<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>Histology Positive Control Tissue</b>	Human tonsil
--	--------------

---

<b>References</b>	1. 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>
-------------------	---

2. Jones, M. *et al.* (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. *et al.* (1998) Characterization of immunocompetent cells in the diseased canine periodontium. [J Histochem Cytochem. 46: 1443-54.](#)
4. Spaas, J.H. *et al.* (2013) Culture and characterisation of equine peripheral blood mesenchymal stromal cells. [Vet J. 195 \(1\): 107-13.](#)
5. Nelson, D.D. *et al.* (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.](#)

---

<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>	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. 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.
----------------	---

---

<b>Guarantee</b>	12 months from date of despatch
------------------	---------------------------------

---

<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10041 available at: 10041: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf</a>
--------------------------------------	---

---

<b>Regulatory</b>	For research purposes only
-------------------	----------------------------

---

## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
----------------------------------	---	------------------	---	---------------	---

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)  
'M367146:200529'

Printed on 23 Feb 2023

