

Datasheet: MCA2538A647

### **BATCH NUMBER 162834**

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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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<sup>™</sup> (Product Code <u>BUF09</u>) 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 conjug	ated to Alexa Fluor® 64	7 - liquid				
Product Form  Max Ex/Em	Purified IgG conjug	ated to Alexa Fluor® 64	·				

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 <sub>3</sub> )  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	UniProt: P11912 Related reagents  Entrez Gene: 973 CD79A Related reagents				
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	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 <sup>6</sup> cells in 100ul.				
References	<ol> <li>Mason, D.Y. <i>et al.</i> (1991) The IgM-associated protein mb-1 as a marker of normal and neoplastic B cells. <u>J Immunol. 147 (11): 2474-82.</u></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. <u>J Immunol. 150 (12): 5429-35.</u></li> <li>Christgau, M. <i>et al.</i> (1998) Characterization of immunocompetent cells in the diseased canine periodontium. <u>J Histochem Cytochem. 46: 1443-54.</u></li> <li>Spaas, J.H. <i>et al.</i> (2013) Culture and characterisation of equine peripheral blood mesenchymal stromal cells. <u>Vet J. 195 (1): 107-13.</u></li> <li>Nelson, D.D. <i>et al.</i> (2010) CD8(+)/perforin(+)/WC1(-) gammadelta T cells, not CD8(+)</li> </ol>				

- alphabeta T cells, infiltrate vasculitis lesions of American bison (*Bison bison*) with experimental sheep-associated malignant catarrhal fever. <u>Vet Immunol Immunopathol.</u> 136: 284-91.
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- 7. Long, H. *et al.* (2016) Polyostotic Lymphoma in a Ferret (*Mustela putorius furo*). <u>J Comp Pathol. 154 (4): 341-4.</u>
- 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.
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- 10. Froment R & Bédard C (2016) Marked hyperphosphatasemia associated with an acute leukemia in a Great Dane. <u>Vet Clin Pathol. Aug 18. [Epub ahead of print]</u>
- 11. Aresu, L. *et al.* (2015) Canine indolent and aggressive lymphoma: clinical spectrum with histologic correlation. Vet Comp Oncol. 13 (4): 348-62.
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- 15. De Schauwer, C. *et al.* (2014) Characterization and profiling of immunomodulatory genes of equine mesenchymal stromal cells from non-invasive sources. <u>Stem Cell Res</u> 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. <u>Vet Microbiol. 176 (1-2): 32-9.</u>
- 17. Novacco, M. *et al.* (2015) Prognostic factors in canine acute leukaemias: a retrospective study. <u>Vet Comp Oncol. Jan 26. [Epub ahead of print]</u>
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subsets in gilts and sows. PLoS One. 16 (5): e0249366.

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- 28. Mu&mtilde;oz-Silvestre, A. *et al.* (2020) Pathogenesis of Intradermal Staphylococcal Infections: Rabbit Experimental Approach to Natural *Staphylococcus aureus* Skin Infections. <u>Am J Pathol. 190 (6): 1188-210.</u>
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#### **Further Reading**

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

#### Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

### Guarantee

12 months from date of despatch

### Acknowledgements

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**Health And Safety** Material Safety Datasheet documentation #10041 available at: Information 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

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

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