Datasheet: MCA2538H

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

	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.**

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 - liquid

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 0.1mg/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
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.
Histology Positive Control Tissue	Human tonsil
References	1. Mason, D.Y. *et al.* (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. *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. Del Cacho, E. *et al.* (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. *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. 7. 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. 8. Long, H. *et al.* (2016) Polyostotic Lymphoma in a Ferret (*Mustela putorius furo*). J Comp Pathol. 154 (4): 341-4. 9. 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. 10. 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.

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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]
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]
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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	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.
Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP

Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®549, DyLight®649, DyLight®680, DyLight®800, FITC, HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Human Anti Mouse IgG1 (HCA036...)	HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

Recommended Useful Reagents

HISTAR DETECTION SYSTEM (STAR3000A)
HISTAR DETECTION SYSTEM (STAR3000B)
HISTAR DETECTION SYSTEM (STAR3000C)

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