

Datasheet: MCA2209

Description:	RAT ANTI MOUSE CD79b
Specificity:	CD79b
Other names:	B29
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AT107-2
Isotype:	IgG1
Quantity:	0.2 mg

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)	▪			1/500 - 1/1000
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
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 permeabilization is required for this application. The use of Leucoperm (Product Code [BUF09](#)) is recommended for this purpose.

Target Species	Mouse
Species Cross Reactivity	<p>Reacts with: Human, Rat, Pig, Dog, Koala, Tasmanian Devil, Cat</p> <p>Does not react with: Chicken</p> <p>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.</p>
Product Form	Purified IgG - liquid

Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	TRIS buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN ₃)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Peptide containing 20 amino acid residues from mouse CD79b conjugated to Keyhole Limpet Hemocyanin (KLH).
External Database Links	<p>UniProt: P15530 Related reagents</p> <p>Entrez Gene: 15985 Cd79b Related reagents</p>
Synonyms	Igb
RRID	AB_324357
Fusion Partners	Spleen cells from immunized rat were fused with cells of the mouse NS-1 myeloma cell line.
Specificity	Rat anti Mouse CD79b antibody, clone AT107-2 recognizes a cytoplasmic region of mouse B-cell antigen receptor complex-associated protein beta chain, also known as B-cell-specific glycoprotein B29, Ig-beta, or Immunoglobulin-associated B29 protein. CD79b is a 228 amino acid, including a 26 signal peptide ~40 kDa type I single pass transmembrane glycoprotein. CD79b is expressed by B lymphocytes and associates with CD79a to form a heterodimer, non-covalently linked to surface immunoglobulin, forming the B-cell receptor (BCR) complex. Rat anti Mouse CD79b antibody, clone AT107-2 also recognizes a homologous region of human CD79b.
Flow Cytometry	Use 10µl of the suggested working dilution to label 1x10 ⁶ cells in 100µl
References	<ol style="list-style-type: none"> Vendel,A.C. <i>et al</i> (2009) B and T lymphocyte attenuator regulates B cell receptor signaling by targeting Syk and BLNK. J Immunol. 182: 1509-17 Kreiss, A. <i>et al</i>. (2009) A histological and immunohistochemical analysis of lymphoid tissues of the Tasmanian devil. Anat Rec (Hoboken). 292: 611-20. Dornan, D. <i>et al</i>. (2009) Therapeutic potential of an anti-CD79b antibody-drug conjugate, anti-CD79b-vc-MMAE, for the treatment of non-Hodgkin lymphoma. Blood. 114: 2721-9. Lau, Q. <i>et al</i>. (2012) Expression and <i>in vitro</i> upregulation of MHCII in koala

- lymphocytes. [Vet Immunol Immunopathol. 147: 35-43.](#)
5. Thalheim, L. *et al.* (2013) Lymphoma immunophenotype of dogs determined by immunohistochemistry, flow cytometry, and polymerase chain reaction for antigen receptor rearrangements. [J Vet Intern Med. 27 \(6\): 1509-16.](#)
 6. McCurdy, P. *et al.* (2014) Acute lymphoblastic leukemia in a pygmy hippopotamus (*Hexaprotodon liberiensis*). [J Zoo Wildl Med. 45 \(4\): 906-10.](#)
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 8. Ouyang, K. *et al.* (2015) Evaluation of humoral immune status in porcine epidemic diarrhea virus (PEDV) infected sows under field conditions. [Vet Res. 46: 140.](#)
 9. Whitney, J.L. *et al.* (2016) Immunohistochemical Analysis of Leucocyte Subsets in the Sinonasal Mucosa of Cats with Upper Respiratory Tract Aspergillosis. [J Comp Pathol. 155 \(2-3\): 130-40.](#)
 10. Poggi, A. *et al.* (2017) Prognostic significance of Ki67 evaluated by flow cytometry in dogs with high-grade B-cell lymphoma. [Vet Comp Oncol. 15 \(2\): 431-40.](#)
 11. Bennett, A.L. *et al.* (2017) Canine acute leukaemia: 50 cases (1989-2014). [Vet Comp Oncol. 15 \(3\): 1101-14.](#)
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 13. Tilly, H. *et al.* (2019) Polatuzumab vedotin in combination with immunochemotherapy in patients with previously untreated diffuse large B-cell lymphoma: an open-label, non-randomised, phase 1b–2 study [The Lancet Oncology. 20 \(7\): 998-1010.](#)
 14. Allan, J.N. *et al.* (2019) CD79b Expression in Richter's Transformation [Blood. 134 \(Supplement 1\): 4279.](#)
 15. Borthwick, C.R. *et al.* (2019) An Examination of the Development and Localization of Key Immune Cells in Developing Pouch Young of the Red-Tailed Phascogale (*Phascogale calura*). [Anat Rec \(Hoboken\). 302 \(11\): 1985-2002.](#)
 16. Sehn, L.H. *et al.* (2020) Polatuzumab Vedotin in Relapsed or Refractory Diffuse Large B-Cell Lymphoma. [J Clin Oncol. 38 \(2\): 155-65.](#)
 17. Antognoni, M.T. *et al.* (2021) Non Epitheliotropic B-Cell Lymphoma with Plasmablastic Differentiation vs. Cutaneous Plasmacytosis in a 12-Years-Old Beagle: Case Presentation and Clinical Review. [Vet Sci. 8 \(12\): 317.](#)
 18. Herrera, A.F. *et al.* (2022) Anti-CD79B Antibody-Drug Conjugate DCDS0780A in Patients with B-Cell Non-Hodgkin Lymphoma: Phase 1 Dose-Escalation Study. [Clin Cancer Res. 28 \(7\):1294-301.](#)
 19. Amimo, J.O. *et al.* (2024) Maternal immunization and vitamin A sufficiency impact sow primary adaptive immunity and passive protection to nursing piglets against porcine epidemic diarrhea virus infection. [Front Immunol. 15: 1397118.](#)

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.

Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #10057 available at: https://www.bio-rad-antibodies.com/SDS/MCA2209 10057
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight@800
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight@550 , DyLight@650 , DyLight@800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (STAR69...)	FITC

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M437802:250319'

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