

Datasheet: MCA1258GT

BATCH NUMBER 168366

Description:	RAT ANTI MOUSE CD45R
Specificity:	CD45R
Other names:	B220, LY-5
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	RA3-6B2
Isotype:	IgG2a
Quantity:	25 µg

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	▪			1/100 - 1/200
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			
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) **PLP fixation is recommended for optimal results, see [Whiteland et al.](#) for details**

Target Species

Mouse

Species Cross Reactivity

Reacts with: Human, Cat

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 - liquid

Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN ₃)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	Murine leukemia-induced pre-B tumor cells (RAW112)
External Database Links	<p>UniProt: P06800 Related reagents</p> <p>Entrez Gene: 19264 Ptprc Related reagents</p>
Synonyms	Ly-5
RRID	AB_1102070
Fusion Partners	Spleen cells from immunized Lewis rats were fused with cells of the rat S194/5 XX0.BU-1 myeloma cell line
Specificity	<p>Rat anti Mouse CD45R antibody, clone RA3-6B2 recognizes murine CD45R, a form of the CD45 antigen expressed by B cells and lytically active subsets of NK cells and non-MHC restricted CTL's. Rat anti Mouse CD45R antibody, clone RA3-6B2 immunoprecipitates the high molecular weight form of CD45 (220 kDa).</p> <p>Rat anti Mouse CD45R antibody, clone RA3-6B2 is suitable for plp fixed paraffin embedded tissues (Whiteland <i>et al.</i> 1995).</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl.
References	<ol style="list-style-type: none"> Holmes, K.L. <i>et al.</i> (1986) Analysis of neoplasms induced by Cas-Br-M MuLV tumor extracts. J Immunol. 137 (2): 679-88. Spangrude, G.J. <i>et al.</i> (1988) Purification and characterization of mouse hematopoietic stem cells. Science. 241: 58-62. Spangrude, G.J. <i>et al.</i> (1988) Two rare populations of mouse Thy-1lo bone marrow cells repopulate the thymus. J Exp Med. 167 (5): 1671-83. Whiteland, J.L. <i>et al.</i> (1995) Immunohistochemical detection of T-cell subsets and other leukocytes in paraffin-embedded rat and mouse tissues with monoclonal antibodies. J Histochem Cytochem. 43 (3): 313-20. Hawke, S. <i>et al.</i> (1998) Long-term persistence of activated cytotoxic T lymphocytes

- after viral infection of the central nervous system. [J Exp Med. 187: 1575-82.](#)
6. Rosmalen, J.G. *et al.* (2000) Subsets of macrophages and dendritic cells in nonobese diabetic mouse pancreatic inflammatory infiltrates: correlation with the development of diabetes. [Lab Invest. 80 \(1\): 23-30.](#)
 7. Stevenson, P.G. *et al.* (2002) Uncoupling of virus-induced inflammation and anti-viral immunity in the brain parenchyma. [J Gen Virol. 83: 1735-43.](#)
 8. Perry, M.J. *et al.* (2000) Effects of high-dose estrogen on murine hematopoietic bone marrow precede those on osteogenesis. [Am J Physiol Endocrinol Metab. 279: E1159-65.](#)
 9. Straubinger, R.K. *et al.* (2003) Quantitative evaluation of inflammatory and immune responses in the early stages of chronic *Helicobacter pylori* infection. [Infect Immun. 71: 2693-703.](#)
 10. Shulga-Morskaya, S. *et al.* (2004) B cell-activating factor belonging to the TNF family acts through separate receptors to support B cell survival and T cell-independent antibody formation. [J Immunol. 173 \(4\): 2331-41.](#)
 11. Gengozian, N. *et al.* (2005) Characterization of a monoclonal antibody identifying a CD45RA antigen on feline leukocytes. [Vet Immunol Immunopathol. 108: 253-64.](#)
 12. Herrmann, I. *et al.* (2006) *Streptococcus pneumoniae* Infection aggravates experimental autoimmune encephalomyelitis via Toll-like receptor 2. [Infect Immun. 74: 4841-8.](#)
 13. Itoh, T. *et al.* (2007) Ddb2 is a haploinsufficient tumor suppressor and controls spontaneous germ cell apoptosis. [Hum Mol Genet. 16: 1578-86.](#)
 14. McGill, J. *et al.* (2009) Fetal exposure to ethanol has long-term effects on the severity of influenza virus infections. [J Immunol. 182: 7803-8](#)
 15. Ankeny, D.P. *et al.* (2009) B cells produce pathogenic antibodies and impair recovery after spinal cord injury in mice. [J Clin Invest. 119: 2990-9.](#)
 16. Lacroix-Lamande, S. *et al.* (2009) Neonate intestinal immune response to CpG oligodeoxynucleotide stimulation. [PLoS One. 4: e8291.](#)
 17. Lundqvist, J. *et al.* (2010) Concomitant infection decreases the malaria burden but escalates relapsing fever borreliosis. [Infect Immun. 78 \(5\): 1924-30.](#)
 18. Giuriato, S. *et al.* (2010) Conditional TPM3-ALK and NPM-ALK transgenic mice develop reversible ALK-positive early B-cell lymphoma/leukemia. [Blood. 115: 4061-70.](#)
 19. Kleiter, I. *et al.* (2010) Smad7 in T cells drives T helper 1 responses in multiple sclerosis and experimental autoimmune encephalomyelitis. [Brain. 133: 1067-81.](#)
 20. Nakaya, T. *et al.* (2010) Critical role of Pcid2 in B cell survival through the regulation of MAD2 expression. [J Immunol. 185: 5180-7.](#)
 21. Soejima, M. *et al.* (2011) Role of innate immunity in a murine model of histidyl-transfer RNA synthetase (Jo-1)-mediated myositis. [Arthritis Rheum. 63: 479-87.](#)
 22. Bertilaccio, M.T. *et al.* (2011) Lack of TIR8/SIGIRR triggers progression of chronic lymphocytic leukemia in mouse models. [Blood. 118: 660-9.](#)
 23. Zhou, Z. *et al.* (2011) Autoreactive marginal zone B cells enter the follicles and interact with CD4+ T cells in lupus-prone mice. [BMC Immunol. 2011; 12:7.](#)
 24. Fanning, S. *et al.* (2012) Bifidobacterial surface-exopolysaccharide facilitates commensal-host interaction through immune modulation and pathogen protection. [Proc Natl Acad Sci U S A. 109 \(6\): 2108-13.](#)
 25. Ruf, M.T. *et al.* (2012) Chemotherapy-Associated Changes of Histopathological Features of *Mycobacterium ulcerans* Lesions in a Buruli Ulcer Mouse Model. [Antimicrob Agents Chemother. 56: 687-96.](#)

26. Carpenter, R.S. *et al.* (2015) Traumatic spinal cord injury in mice with human immune systems. [Exp Neurol. 271: 432-44.](#)
27. Lastrucci, C. *et al.* (2015) Molecular and cellular profiles of the resolution phase in a damage-associated molecular pattern (DAMP)-mediated peritonitis model and revelation of leukocyte persistence in peritoneal tissues. [FASEB J. 29 \(5\): 1914-29.](#)
28. Gibson-Corley, K.N. *et al.* (2016) A method for histopathological study of the multifocal nature of spinal cord lesions in murine experimental autoimmune encephalomyelitis. [PeerJ. 4: e1600.](#)
29. Thiele Née Schrewe, L. *et al.* (2020) Functional relevance of the multi-drug transporter abcg2 on teriflunomide therapy in an animal model of multiple sclerosis. [J Neuroinflammation. 17 \(1\): 9.](#)
30. Allen, A.C. *et al.* (2021) Parallel *in vivo*. experimental evolution reveals that increased stress resistance was key for the emergence of persistent tuberculosis bacilli. [Nat Microbiol. 6 \(8\): 1082-93.](#)
31. Chanut, F.J.A. *et al.* (2021) Conditioning Regimens in Long-Term Pre-Clinical Studies to Support Development of Ex Vivo Gene Therapy: Review of Nonproliferative and Proliferative Changes. [Hum Gene Ther. 32 \(1-2\): 66-76.](#)
32. Jaensch, S.M. *et al.* (2022) Clinicopathologic and immunophenotypic features in dogs with presumptive large granular lymphocyte leukaemia. [Aust Vet J. 100 \(11\): 527-32.](#)
33. Roca, C.P. *et al.* (2023) A cross entropy test allows quantitative statistical comparison of t-SNE and UMAP representations [Cell Reports Methods. 3 \(1\): 100390.](#)
34. Kohlmeyer, J.L. *et al.* (2023) CDK4/6-MEK Inhibition in MPNSTs Causes Plasma Cell Infiltration, Sensitization to PD-L1 Blockade, and Tumor Regression. [Clin Cancer Res. 29 \(17\): 3484-97.](#)

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

Health And Safety Information

Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1258GT>
10040

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR69...)	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](#)

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL \(MCA1212\)](#)

Recommended Useful Reagents

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025A\)](#)

North & South Tel: +1 800 265 7376

Worldwide

Tel: +44 (0)1865 852 700

Europe

Tel: +49 (0) 89 8090 95 21

America Fax: +1 919 878 3751

Fax: +44 (0)1865 852 739

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_us@bio-rad.com

Email: antibody_sales_uk@bio-rad.com

Email: antibody_sales_de@bio-rad.com

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

'M408723:221013'

Printed on 12 Dec 2024

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)