



Datasheet: MCA1258G

BATCH NUMBER 156507

Description:	RAT ANTI MOUSE CD45R
Specificity:	CD45R
Other names:	B220, LY-5
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	RA3-6B2
Isotype:	IgG2a
Quantity:	0.25 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	▪			1/100 - 1/200
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	
Immunofluorescence	▪			

Where this antibody 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 antibody 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
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_323211
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 et al.1995).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> Coffman, R.L. (1982) Surface antigen expression and immunoglobulin gene rearrangement during mouse pre-B cell development. Immunol Rev. 69: 5-23. Rosmalen, J.G. <i>et al.</i> (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. 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.

4. Spangrude, G.J. *et al.* (1988) Purification and characterization of mouse hematopoietic stem cells. [Science. 241: 58-62.](#)
5. Spangrude, G.J. *et al.* (1988) Two rare populations of mouse Thy-1lo bone marrow cells repopulate the thymus. [J Exp Med. 167 \(5\): 1671-83.](#)
6. Holmes, K.L. *et al.* (1986) Analysis of neoplasms induced by Cas-Br-M MuLV tumor extracts. [J Immunol. 137 \(2\): 679-88.](#)
7. 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.](#)
8. Lundqvist, J. *et al.* (2010) Concomitant infection decreases the malaria burden but escalates relapsing fever borreliosis. [Infect Immun. 78 \(5\): 1924-30.](#)
9. Herrmann, I. *et al.* (2006) Streptococcus pneumoniae Infection aggravates experimental autoimmune encephalomyelitis via Toll-like receptor 2. [Infect Immun. 74: 4841-8.](#)
10. 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.](#)
11. Lacroix-Lamande, S. *et al.* (2009) Neonate intestinal immune response to CpG oligodeoxynucleotide stimulation. [PLoS One. 4: e8291.](#)
12. Bertilaccio, M.T. *et al.* (2011) Lack of TIR8/SIGIRR triggers progression of chronic lymphocytic leukemia in mouse models. [Blood. 118: 660-9.](#)
13. Gengozian, N. *et al.* (2005) Characterization of a monoclonal antibody identifying a CD45RA antigen on feline leukocytes. [Vet Immunol Immunopathol. 108: 253-64.](#)
14. 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.](#)
15. Hawke, S. *et al.* (1998) Long-term persistence of activated cytotoxic T lymphocytes after viral infection of the central nervous system. [J Exp Med. 187: 1575-82.](#)
16. Nakaya, T. *et al.* (2010) Critical role of Pcid2 in B cell survival through the regulation of MAD2 expression. [J Immunol. 185: 5180-7.](#)
17. 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.](#)
18. 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.](#)
19. 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.](#)
20. 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.](#)
21. 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.](#)
22. 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.](#)
23. Carpenter, R.S. *et al.* (2015) Traumatic spinal cord injury in mice with human immune systems. [Exp Neurol. 271: 432-44.](#)
24. 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.](#)
25. Thiele, L.S.N. *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.](#)

Storage Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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/MCA1258G>
10040

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

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

Recommended Negative Controls

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

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 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](https://www.bio-rad-antibodies.com/datasheets)
'M365005:200529'

Printed on 14 Mar 2023

© 2023 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)