

Datasheet: MCA1258F

Description:	RAT ANTI MOUSE CD45R:FITC
Specificity:	CD45R
Other names:	B220, LY-5
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	RA3-6B2
Isotype:	IgG2a
Quantity:	0.1 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	■			Neat - 1/10

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.

Target Species	Mouse		
Species Cross Reactivity	Reacts with: Human, Cat N.B. Antibody reactivity and working conditions may vary between species.		
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid.		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
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		
	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml		
Immunogen	Murine leukaemia-induced pre-B tumour cells (RAW112).		

**External Database
Links**

UniProt:

[P06800](#)

[Related reagents](#)

Entrez Gene:

[19264](#)

Ptprc

[Related reagents](#)

Synonyms

Ly-5

Fusion Partners

Spleen cells from immunized Lewis rats were fused with cells of the rat S194/5 XX0.BU-1 myeloma cell line.

Specificity

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 (220kD).

Rat anti Mouse CD45R antibody, clone RA3-6B2 has been reported as being suitable for plp fixed paraffin embedded tissues (Whiteland *et al.*1995).

Flow Cytometry

Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR ([BUF041A/B](#)).

References

1. Coffman, R.L. (1982) Surface antigen expression and immunoglobulin gene rearrangement during mouse pre-B cell development. [Immunol Rev. 69: 5-23.](#)
2. 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.](#)
3. Whiteland, J.L. *et al.* (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. Monteith, C.E. *et al.* (1996) Identification of monoclonal antibodies for immunohistochemical staining of feline B lymphocytes in frozen and formalin-fixed paraffin-embedded tissues. [Can J Vet Res. 60 \(3\): 193-8.](#)
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. Mori, H. *et al.* (2015) Introduction of Zinc-salt Fixation for Effective Detection of Immune Cell-related Markers by Immunohistochemistry. [Toxicol Pathol. pii: 0192623315587593.](#)
 24. Carpenter, R.S. *et al.* (2015) Traumatic spinal cord injury in mice with human immune systems. [Exp Neurol. 271: 432-44.](#)
 25. 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.](#)

Storage

Store at +4°C for one month or at -20°C for longer.

This product should be stored undiluted. This product is photosensitive and should be protected from light.

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 Negative Controls

[RAT IgG2a NEGATIVE CONTROL:FITC \(MCA1212F\)](#)

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

Printed on 05 May 2018

© 2018 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)