

Datasheet: MCA1258SBY720

Description:	RAT ANTI MOUSE CD45R:StarBright Yellow 720
Specificity:	CD45R
Other names:	B220, LY-5
Format:	StarBright Yellow 720
Product Type:	Monoclonal Antibody
Clone:	RA3-6B2
Isotype:	lgG2a
Quantity:	100 TESTS/0.5ml

## **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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	•			Neat

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.

Target Species	Mouse			
Species Cross	Reacts with: Human,	Cat		
Reactivity	reactivity is derived fr	ity and working condition testing within our lations from the originate	aboratories, peer-re	eviewed publications
Product Form	Purified IgG conjugated to StarBright Yellow 720 - liquid			
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm	n)
	StarBright Yellow 720	549	719	
Preparation	Purified IgG prepared supernatant	d by affinity chromatog	raphy on Protein G	from tissue culture

Preservative Stabilisers

0.09% Sodium Azide (NaN<sub>3</sub>)1% Bovine Serum Albumin

0.1% Pluronic F680.1% PEG 33500.05% Tween 20

**Immunogen** 

Murine leukemia-induced pre-B tumor 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 (220 kDa).

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

Flow Cytometry

Use  $5\mu$ I of the suggested working dilution to label  $10^6$  cells in  $100\mu$ I. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.

#### References

- 1. Holmes, K.L. *et al.* (1986) Analysis of neoplasms induced by Cas-Br-M MuLV tumor extracts. <u>J Immunol</u>. 137 (2): 679-88.
- 2. Spangrude, G.J. *et al.* (1988) Purification and characterization of mouse hematopoietic stem cells. Science. 241: 58-62.
- 3. 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.
- 4. 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. <u>J</u> <u>Histochem Cytochem. 43 (3): 313-20.</u>
- 5. 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.
- 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. <u>J Gen Virol. 83: 1735-43.</u>
- 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. <u>Infect Immun. 71:</u> 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. <u>J Immunol. 173 (4): 2331-41.</u>
- 11. Gengozian, N. *et al.* (2005) Characterization of a monoclonal antibody identifying a CD45RA antigen on feline leukocytes. <u>Vet Immunol Immunopathol. 108: 253-64.</u>
- 12. Herrmann, I. *et al.* (2006) Streptococcus pneumoniae Infection aggravates experimental autoimmune encephalomyelitis via Toll-like receptor 2. <u>Infect Immun. 74:</u> 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. <u>J Clin Invest. 119: 2990-9.</u>
- 16. Lacroix-Lamande, S. *et al.* (2009) Neonate intestinal immune response to CpG oligodeoxynucleotide stimulation. <u>PLoS One. 4: e8291.</u>
- 17. Lundqvist, J. *et al.* (2010) Concomitant infection decreases the malaria burden but escalates relapsing fever borreliosis. <u>Infect Immun. 78 (5): 1924-30.</u>
- 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. <u>Brain. 133: 1067-81.</u>
- 20. Nakaya, T. *et al.* (2010) Critical role of Pcid2 in B cell survival through the regulation of MAD2 expression. <u>J Immunol. 185: 5180-7.</u>
- 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. <u>BMC Immunol. 2011; 12:7.</u>
- 24. Fanning, S. *et al.* (2012) Bifidobacterial surface-exopolysaccharide facilitates commensal-host interaction through immune modulation and pathogen protection. <u>Proc Natl Acad Sci U S A. 109 (6): 2108-13.</u>
- 25. Ruf, M.T. *et al.* (2012) Chemotherapy-Associated Changes of Histopathological Features of Mycobacterium ulcerans Lesions in a Buruli Ulcer Mouse Model. <u>Antimicrob Agents Chemother. 56: 687-96.</u>
- 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. <u>J</u> 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. <u>Nat Microbiol. 6 (8): 1082-93.</u>
- 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. <u>Hum Gene Ther. 32 (1-2): 66-76.</u>
- 32. Jaensch, S.M. *et al.* (2022) Clinicopathologic and immunophenotypic features in dogs with presumptive large granular lymphocyte leukaemia. <u>Aust Vet J. 100 (11): 527-32.</u>
- 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. <u>Clin Cancer Res. 29</u> (17): 3484-97.

Storage	Store at +4°C. DO NOT FREEZE.
	This product should be stored undiluted.
Guarantee	12 months from date of despatch
Acknowledgements	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
Health And Safety	Material Safety Datasheet documentation #20471 available at:
Information	https://www.bio-rad-antibodies.com/SDS/MCA1258SBY720
	20471
Regulatory	For research purposes only

# **Related Products**

## **Recommended Useful Reagents**

MOUSE SEROBLOCK FcR (BUF041A)
MOUSE SEROBLOCK FcR (BUF041B)

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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 'M418450:230420'

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