

## Datasheet: MCA1258SBY720

**BATCH NUMBER 100007307**

<b>Description:</b>	RAT ANTI MOUSE CD45R:StarBright Yellow 720
<b>Specificity:</b>	CD45R
<b>Other names:</b>	B220, LY-5
<b>Format:</b>	StarBright Yellow 720
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	RA3-6B2
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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 [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	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 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 conjugated to StarBright Yellow 720 - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	StarBright Yellow 720	548	719

#### Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350 0.05% Tween 20
<b>Immunogen</b>	Murine leukemia-induced pre-B tumor cells (RAW112)
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P06800</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">19264</a>    Ptprc    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	Ly-5
<b>Fusion Partners</b>	Spleen cells from immunized Lewis rats were fused with cells of the rat S194/5 XX0.BU-1 myeloma cell line
<b>Specificity</b>	<p><b>Rat anti Mouse CD45R antibody, clone RA3-6B2</b> 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 (<a href="#">Whiteland et al.1995</a>).</p>
<b>Flow Cytometry</b>	Use 5µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.
<b>References</b>	<ol style="list-style-type: none"> <li>Holmes, K.L. <i>et al.</i> (1986) Analysis of neoplasms induced by Cas-Br-M MuLV tumor extracts. <a href="#">J Immunol. 137 (2): 679-88.</a></li> <li>Spangrude, G.J. <i>et al.</i> (1988) Purification and characterization of mouse hematopoietic stem cells. <a href="#">Science. 241: 58-62.</a></li> <li>Spangrude, G.J. <i>et al.</i> (1988) Two rare populations of mouse Thy-1lo bone marrow cells repopulate the thymus. <a href="#">J Exp Med. 167 (5): 1671-83.</a></li> <li>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. <a href="#">J Histochem Cytochem. 43 (3): 313-20.</a></li> <li>Hawke, S. <i>et al.</i> (1998) Long-term persistence of activated cytotoxic T lymphocytes after viral infection of the central nervous system. <a href="#">J Exp Med. 187: 1575-82.</a></li> <li>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. <a href="#">Lab Invest. 80 (1): 23-30.</a></li> <li>Stevenson, P.G. <i>et al.</i> (2002) Uncoupling of virus-induced inflammation and anti-viral</li> </ol>

- 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, 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.](#)
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. 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.](#)
32. 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.](#)

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

## Related Products

### Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto: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](mailto: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://bio-rad-antibodies.com/datasheets)

'M416107:230130'

Printed on 04 Apr 2024