

Datasheet: MCA1031SBB700

BATCH NUMBER 64722410

Description:	RAT ANTI MOUSE CD45:StarBright Blue 700
Specificity:	CD45
Other names:	LCA
Format:	StarBright Blue 700
Product Type:	Monoclonal Antibody
Clone:	YW62.3
Isotype:	IgG2b
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 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						
Product Form	Purified IgG conjugated to StarBright Blue 700 - liquid						
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>StarBright Blue 700</td> <td>473</td> <td>703</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	StarBright Blue 700	473	703
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
StarBright Blue 700	473	703					
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) 1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350						

0.05% Tween 20

Approx. Protein Concentrations	For information on the concentration of our StarBright Dye conjugated reagents please visit our FAQ page.
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Immunogen	Mouse spleen cells.
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External Database Links	UniProt: P06800 Related reagents Entrez Gene: 19264 Ptprc Related reagents
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Synonyms	Ly-5
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Fusion Partners	Spleen cells from immunised DA rats were fused with cells of the rat Y3/Ag1.2.3 myeloma cell line.
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Specificity	<p>Rat anti Mouse CD45 antibody, clone YW62.3 recognizes the murine CD45 cell surface antigen, a single pass type1 transmembrane glycoprotein also known as protein tyrosine phosphatase receptor type C (PTPRC) and originally termed Leucocyte Common Antigen (LCA). CD45 is a 180-220kDa glycoprotein expressed by all leucocytes.</p> <p>CD45 is encoded by 3 alleles in mice, differentially expressed by various inbred strains. The Ly5 gene was originally described with the gene product LY5.1 expressed in C57bl/6 and Ly5.2 expressed in SJL strains (Komura et al. 1975), this was subsequently expanded to include a third allele encoding Ly5.3 (Shen et al. 1986). Further, in 1987 a reversal of nomenclature was instigated resulting in the allele in C57bl/6 becoming Ly5^b encoding Ly5.2 and the allele in SJL mice becoming Ly5^a encoding Ly5.1 (Morse et al. 1987). Further changes were made in 1992 with Ly5.1 becoming CD45.1 (SJL) and Ly5.2 becoming CD45.2 (C57bl/6). Finally, following work demonstrating homology between the CD45 antigen and a receptor linked protein tyrosine phosphatase the CD45^a gene was renamed Ptprc^a and CD45^b renamed Ptprc^b (Charbonneau et al. 1988; Zebedee et al. 1991).</p> <p>A number of different isoforms of CD45 are expressed on murine leucocytes depending on the pattern of alternative splicing of 3 exons termed A, B and C encoding regions of ~ 50 amino acids located at the N terminal region of the extracellular portion of CD45. The restricted proteins are termed CD45R with a designation depending on the expressed codon product. (Birkeland et al. 1989).</p> <p>Rat anti mouse CD45 antibody, clone YW62.3 is reactive with all isoforms of murine CD45.</p> <p>N.B. Some reactivity with human tissue has been observed.</p>
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Flow Cytometry	Use 5µl of the suggested working dilution to label 10 ⁶ cells in 100µl. Best practices
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suggest a 5 minutes centrifugation at 6,000g prior to sample application.

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Storage

This product is shipped at ambient temperature.
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 Information	Material Safety Datasheet documentation #20471 available at: https://www.bio-rad-antibodies.com/SDS/MCA1031SBB700
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

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

Product inquiries: www.bio-rad-antibodies.com/technical-support

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Printed on 11 Mar 2026