

Datasheet: MCA1031SBV790

Description:	RAT ANTI MOUSE CD45:StarBright Violet 790	
Specificity:	CD45	
Other names:	LCA	
Format:	StarBright Violet 790	
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 <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		
Product Form	Purified IgG conjugat	ed to StarBright Violet	790 - liquid
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm
	StarBright Violet 790	401	782
Preparation	Purified IgG prepared	I by affinity chromatog	ranhy on Protein G
	supernatant	i by animity officinategr	raphy of the following
Buffer Solution			парту от готош о
Buffer Solution Preservative	supernatant	aline	арпу спт тогош с
	supernatant  Phosphate buffered s	aline (NaN <sub>3</sub> )	арпу спт тогош с
Preservative	Phosphate buffered s	aline (NaN <sub>3</sub> )	арпу спт токопт с
Preservative	Phosphate buffered s 0.09% Sodium Azide 1% Bovine Serum All	aline (NaN <sub>3</sub> )	арпу спт тогошт с

Immunogen	Mouse spleen cells.
External Database Links	UniProt: P06800 Related reagents
	Entrez Gene:  19264 Ptprc Related reagents
Synonyms	Ly-5
Fusion Partners	Spleen cells from immunised DA rats were fused with cells of the rat Y3/Ag1.2.3 myeloma cell line.
Specificity	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.
	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 <sup>b</sup> encoding Ly5.2 and the allele in SJL mice becoming Ly5 <sup>a</sup> 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 <sup>a</sup> gene was renamed Ptprc <sup>a</sup> and CD45 <sup>b</sup> renamed Ptprc <sup>b</sup> (Charbonneau et al. 1988; Zebedee et al. 1991).
	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).
	Rat anti mouse CD45 antibody, clone YW62.3 is reactive with all isoforms of murine CD45.
	N.B. Some reactivity with human tissue has been observed.

**Flow Cytometry** 

Use 5ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.

References

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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 Information	Material Safety Datasheet documentation #20471 available at: 20471: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/20471.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/20471.pdf</a>
Regulatory	For research purposes only

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#### Printed on 03 Oct 2021

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