

Datasheet: MCA1031SBUV795

Description:	RAT ANTI MOUSE CD45:StarBright UltraViolet 795		
Specificity:	CD45		
Other names:	LCA		
Format:	StarBright UltraViolet 795		
Product Type:	Monoclonal Antibody		
Clone:	YW62.3		
Isotype:	lgG2b		
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 conjugat	ed to StarBright UltraV	iolet 795 - liquid
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	StarBright UltraViolet 795	340	792
eparation	Purified IgG prepared supernatant	d by affinity chromatog	raphy on Protein G
er Solution	Phosphate buffered s	saline	
servative	0.09% sodium azide	(NaN ₃)	
bilisers	1% bovine serum alb	umin	
	0.1% Pluronic F68		
	0.1% PEG 3350		

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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^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).

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 5μ I of the suggested working dilution to label 10^6 cells in 100μ I. 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	Material Safety Datasheet documentation #20471 available at:

Information https://www.bio-rad-antibodies.com/SDS/MCA1031SBUV795

20471

Regulatory For research purposes only

Related Products

Recommended Useful Reagents

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