

Datasheet: MCA1031SBR715

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| Description: | RAT ANTI MOUSE CD45:StarBright Red 715 |
| Specificity: | CD45 |
| Other names: | LCA |
| Format: | StarBright Red 715 |
| 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.

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| Target Species | Mouse | | |
| Product Form | Purified IgG conjugated to StarBright Red 715 - liquid | | |
| Max Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nm) |
| | StarBright Red 715 | 638 | 712 |
| 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 | | |

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| Approx. Protein Concentrations | For information on the concentration of our StarBright Dye conjugated reagents please visit our FAQ page. |
| Immunogen | Mouse spleen cells. |
| External Database Links | <p>UniProt: P06800 Related reagents</p> <p>Entrez Gene: 19264 Ptprc Related reagents</p> |
| 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 | <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> |
| Flow Cytometry | Use 5µl of the suggested working dilution to label 0.5x10 ⁶ cells in 100µl. Best practices suggest a 5 min centrifugation at 6,000g prior to sample application. |

References

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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. |
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| Guarantee | 12 months from date of despatch |
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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/MCA1031SBR715>

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

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'M447742:260123'

Printed on 11 Mar 2026

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