

**Anti-Mouse CD45R Antibody,  
Clone RA3-6B2, PE**

## Antibodies

Rat monoclonal IgG2a antibody against human, mouse, cat CD45R (B220), PE-conjugated

Catalog #60019PE  
#60019PE.1

200 µg 0.2 mg/mL  
50 µg 0.2 mg/mL



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## Product Description

The RA3-6B2 antibody reacts with an epitope on the extracellular domain of the exon A-restricted isoform of mouse CD45 (B220), an ~220 kDa type I transmembrane glycoprotein expressed on the surface of most hematopoietic cells except mature erythrocytes, platelets and plasma cells; expression of CD45 is lost during differentiation of these cell types. CD45R is also expressed on NK cells. CD45 is a member of the protein tyrosine phosphatase family and functions in a number of immunoregulatory processes, including cell activation, growth, differentiation and oncogenic transformation. The large cytoplasmic portion of CD45 contains two tyrosine phosphatase domains (one which is enzymatically active) that are involved in modulating the function of Src kinases such as Lck and Fyn. Several isoforms of CD45 have been identified, the expression of which differs according to cell type and functional status. Alternative splicing of three exons encoding the extracellular RA, RB and RC polypeptide sequences gives rise to up to 8 isoforms with molecular masses in the range of 200 - 220 kDa. The exon A-restricted isoform of mouse CD45 contains the RA, RB and RC regions and is the largest of the isoforms.

|                      |   |
|----------------------|---|
| Target Antigen Name: | CD45R (B220)  |
| Alternative Names:   | B220, Protein tyrosine phosphatase receptor type C, PTPRC |
| Gene ID:             | 19264/5788  |
| Species Reactivity:  | Human, Mouse, Cat   |
| Host Species:        | Rat   |
| Clonality:           | Monoclonal  |
| Clone:               | RA3-6B2   |
| Isotype:             | IgG2a, kappa  |
| Immunogen:           | Abelson murine leukemia virus-induced pre-B tumor cells   |
| Conjugate:           | PE  |

## Applications

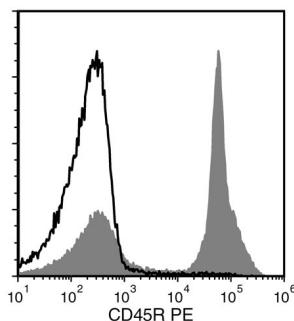
|                       |  |
|-----------------------|--|
| Verified:             | CellSep, FC  |
| Reported:             | FC   |
| Special Applications: | This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Mouse B Cell Enrichment Kit (Catalog #19754) and EasySep™ Mouse B Cell Isolation Kit (Catalog #19854). |

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; WB: Western blotting

## Properties

|                        |  |
|------------------------|--|
| Formulation:           | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide   |
| Purification:          | The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.   |
| Stability and Storage: | Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. For product expiry date, please contact <a href="mailto:techsupport@stemcell.com">techsupport@stemcell.com</a> . |
| Directions for Use:    | For flow cytometry the suggested use of this antibody is ≤ 0.25 µg per 1 x 10 <sup>6</sup> cells in 100 µl volume. It is recommended that the antibody be titrated for optimal performance for each application.                   |

## Data



Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD45R Antibody, Clone RA3-6B2, PE (filled histogram) or a rat IgG2a, kappa PE isotype control antibody (open histogram).

## Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at [www.stemcell.com/antibodies](http://www.stemcell.com/antibodies) or contact us at [techsupport@stemcell.com](mailto:techsupport@stemcell.com).

## References

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