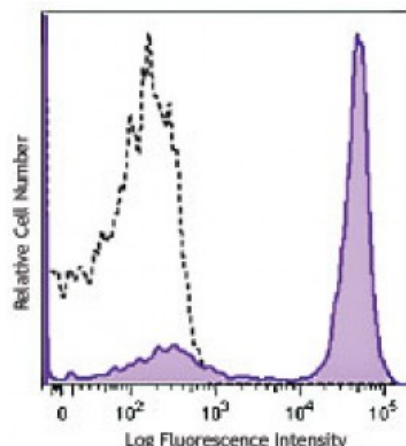


Brilliant Violet 650™ anti-mouse/human CD45R/B220

Catalog # / Size:	1116205 / 125 µl
Clone:	RA3-6B2
Isotype:	Rat IgG2a, κ
Immunogen:	Abelson murine leukemia virus-induced pre-B tumor cells
Reactivity:	Human
Preparation:	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 650™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 650™ and unconjugated antibody.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).
Concentration:	Lot-specific



C57BL/6 mouse splenocytes were stained with CD45R/B220 (clone RA3-6B2) Brilliant Violet 650™ (filled histogram) or rat IgG2a, κ Brilliant Violet 650™ isotype control (open histogram).

Applications:

Applications:	Flow Cytometry
Recommended Usage:	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 650™ excites at 405 nm and emits at 645 nm. The bandpass filter 660/20 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. **Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel.** Refer to your instrument manual or manufacturer for support. Brilliant Violet 650™ is a trademark of Sirigen Group Ltd.

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Application Notes:	Clone RA3-6B2 has been described to react with an epitope on the extracellular domain of the transmembrane CD45 glycoprotein which is dependent upon the expression of exon A and specific carbohydrate residues. Additional reported applications (for the relevant formats) include: immunoprecipitation ¹ , <i>in vitro</i> and <i>in vivo</i> modulation of B cell responses ²⁻⁴ , and immunohistochemistry of acetone-fixed frozen sections and formalin-fixed paraffin-embedded sections ^{5,6} . The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 103216).
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Application	1. Coffman RL. 1982. <i>Immunol. Rev.</i> 69:5. (IP)
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Description: CD45R, also known as B220, is an isoform of CD45. It is a member of the protein tyrosine phosphatase (PTP) family with a molecular weight of approximately 180-240 kD. CD45R is expressed on B cells (at all developmental stages from pro-B cells through mature B cells), activated B cells, and subsets of T and NK cells. CD45R (B220) is also expressed on a subset of abnormal T cells involved in the pathogenesis of systemic autoimmunity in MRL-*Fas*^{lpr} and MRL-*Fas*^{gld} mice. It plays a critical role in TCR and BCR signaling. The primary ligands for CD45 are galectin-1, CD2, CD3, and CD4. CD45R is commonly used as a pan-B cell marker; however, CD19 may be more appropriate for B cell specificity.

- Antigen**
- References:**
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 2. Trowbridge IS, *et al.* 1993. *Annu. Rev. Immunol.* 12:85.
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 4. Pulido R, <