Anti-Mouse CD45R Antibody, Clone RA3-6B2, FITC

Antibodies

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

Catalog	#60019FI	500 µg	0.5 mg/mL
	#100-0423	100 µg	0.5 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. 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 of 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, termed CD45R, contains the RA, RB, and RC regions and is the largest of the isoforms. CD45R is expressed by the B cell lineage from early pro-B to mature B cells, with its expression downregulated during differentiation to plasma cells. CD45R is also expressed on subsets of T, NK, dendritic, and lymphokine-activated killer (LAK) cells.

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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:	FITC (Fluorescein isothiocyanate)

Applications

Verified:	FC
Reported:	FACS, FC, IF, IHC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Mouse B Cell Isolation Kit (Catalog #19854).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered saline, pH 7.2, containing 0.09% sodium azide and 0.1% gelatin
Purification:	The antibody was purified by affinity chromatography and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. Stable until expiry date (EXP) on label.
Directions for Use:	For flow cytometry, the suggested use of this antibody is ≤ 0.25 µg per 1 x 10^6 cells in 100 µL. It is recommended that the antibody be titrated for optimal performance for each application.

Data
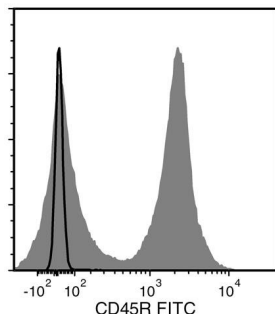
Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD45R Antibody, Clone RA3-6B2, FITC (filled histogram) or Rat IgG2a, kappa Isotype Control Antibody, Clone RTK2758, FITC (Catalog #60076FI) (solid line histogram).

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

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