

Datasheet for ABIN7278616

anti-CD45 antibody (violetFluor™ 500)[Go to Product page](#)**1** Image

Overview

Quantity:	100 µg
Target:	CD45 (PTPRC)
Reactivity:	Human, Mouse
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This CD45 antibody is conjugated to violetFluor™ 500
Application:	Flow Cytometry (FACS)

Product Details

Clone:	RA3-6B2
Isotype:	IgG2a kappa
Cross-Reactivity:	Cat
Purification:	This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

Target Details

Target:	CD45 (PTPRC)
Alternative Name:	CD45R (B220) (PTPRC Products)
Background:	The RA3-6B2 antibody reacts with the human and mouse CD45 isoform known as CD45R, or

Target Details

B220, a protein tyrosine phosphatase of 220 kDa. CD45 is one of the most abundant hematopoietic markers, and is expressed on all leukocytes (the Leukocyte Common Antigen, LCA). Various isoforms are generated and expressed in cell-specific patterns, all critical for leukocyte function. In mouse, the CD45R/B220 isoform is predominantly found on B cells, at varying levels on all stages from pro-B cells to activated B cells, and may also be detected on certain T cell and NK cell subsets. It is of note that B220 is not similarly expressed on human B cells, where it appears to be differentiation-specific and therefore expressed on only some B cell subsets. Other forms of CD45 with restricted cellular expression include CD45RA, CD45RB, CD45RO and several others. The RA3-6B2 antibody is one of the most consistently used leukocyte markers for B cells, T cell subsets and NK cell subsets in human and mouse. This antibody has also been reported as cross-reactive with feline CD45R/B220.

Gene ID: 19264, 5788

UniProt: [P08575](#), [P06800](#)

Pathways: [TCR Signaling](#), [Regulation of Leukocyte Mediated Immunity](#), [Positive Regulation of Immune Effector Process](#), [Production of Molecular Mediator of Immune Response](#), [CXCR4-mediated Signaling Events](#), [BCR Signaling](#)

Application Details

Application Notes: This antibody preparation has been quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). Please refer to the figure legend for the optimal concentration used to stain the tissue shown. We recommend titrating the antibody under your specific conditions to determine the optimal concentration of antibody needed in your experimental system. violetFluor™ 500 dye is excited by the violet (405 nm) laser and has a peak emission of 500 nm. The recommended band pass filter for this dye is 525/20. violetFluor™ 500 can be used as an alternative for BD Horizon™ V500 or Pacific Orange®.

Comment: 0.2 mg/mL

Restrictions: For Research Use only

Handling

Buffer: 10 mM NaH₂PO₄, 150 mM NaCl, 0.09 % Sodium azide, 0.1 % gelatin, pH 7.2

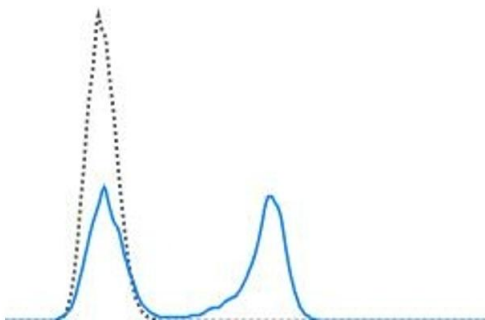
Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

Handling

	should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	2-8°C protected from light
Expiry Date:	12 months

Images



Flow Cytometry

Image 1. C57Bl/6 splenocytes were stained with 0.25 µg violetFluor500 Anti-Hu/Mo CD45R (B220) (ABIN6961868) (solid line) or 0.25 µg violetFluor500 Rat IgG2a isotype control (dashed line).