Datasheet for ABIN1774735

anti-CD45 antibody (FITC)

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Overview

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

Product Details

Purpose:	Anti-Ms CD45R FITC
Immunogen:	Abelson murine leukemia virus-induced pre-B tumor cells
Clone:	RA3-6B2
Isotype:	IgG2a kappa
Specificity:	The rat monoclonal antibody RA3-6B2 recognizes an extracellular epitope on CD45R, which is expressed at all developmental stages of B cells, including activated B cells, but also on subsets of NK and T cells. T cells detected by this antibody are supposed to be in activated state.
Cross-Reactivity (Details):	Human, Mouse, Feline (Cat)
Purification:	Purified antibody is conjugated with fluorescein isothiocyanate (FITC) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

Target Details

Target:	CD45 (PTPRC)
Alternative Name:	CD45R (PTPRC Products)
Background:	CD45R, also known as B220, is a receptor-type protein tyrosine phosphatase glycoprotein. It is crucial in lymphocyte development and antigen signaling, serving as an important regulator of Src-family kinases, promotes cell survival by modulating integrin-mediated signal transduction pathway and is also involved in DNA fragmentation during apoptosis. CD45R expression also identifies a subset of murine bone marrow cells able to form osteoclast-like cells.,PTPRCR, T200R
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:	Flow cytometry: Recommended dilution: 1-4 µg/mL.
Restrictions:	For Research Use only

Handling

Concentration:	0.5 mg/mL
Buffer:	Phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	**Do not freeze.** Avoid prolonged exposure to light.
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Publications

Product cited in:	Lochhead, Sonderegger, Ma, Brewster, Cornwall, Maylor-Hagen, Miller, Zachary, Weis, Weis: " Endothelial cells and fibroblasts amplify the arthritogenic type I IFN response in murine Lyme disease and are major sources of chemokines in Borrelia burgdorferi-infected joint tissue." in:

Publications

Journal of immunology (Baltimore, Md. : 1950), Vol. 189, Issue 5, pp. 2488-501, (2012) (PubMed).

Montecino-Rodriguez, Leathers, Dorshkind: "Identification of a B-1 B cell-specified progenitor." in: **Nature immunology**, Vol. 7, Issue 3, pp. 293-301, (2006) (PubMed).

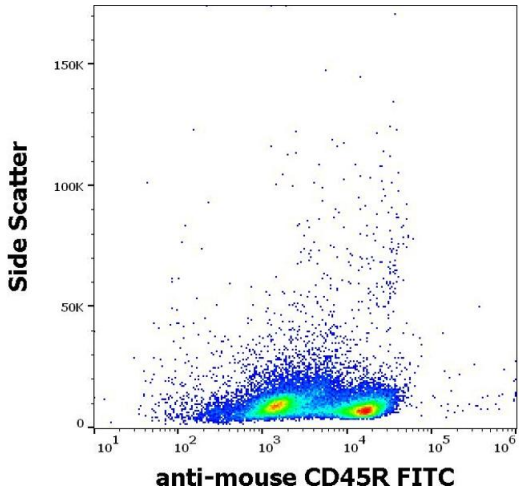
Rothaeusler, Baumgarth: "Evaluation of intranuclear BrdU detection procedures for use in multicolor flow cytometry." in: **Cytometry. Part A : the journal of the International Society for Analytical Cytology**, Vol. 69, Issue 4, pp. 249-59, (2006) (PubMed).

Cappione, Pugh-Bernard, Anolik, Sanz: "Lupus IgG VH4.34 antibodies bind to a 220-kDa glycoform of CD45/B220 on the surface of human B lymphocytes." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 172, Issue 7, pp. 4298-307, (2004) (PubMed).

Tsurui, Nishimura, Hattori, Hirose, Okumura, Shirai: "Seven-color fluorescence imaging of tissue samples based on Fourier spectroscopy and singular value decomposition." in: **The journal of histochemistry and cytochemistry : official journal of the Histochemistry Society**, Vol. 48, Issue 5, pp. 653-62, (2000) (PubMed).

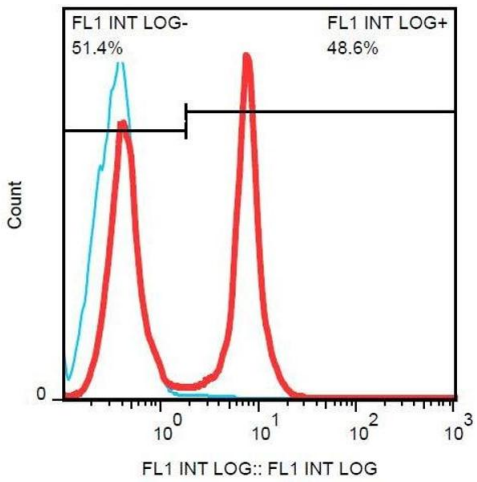
There are more publications referencing this product on: Product page

Images



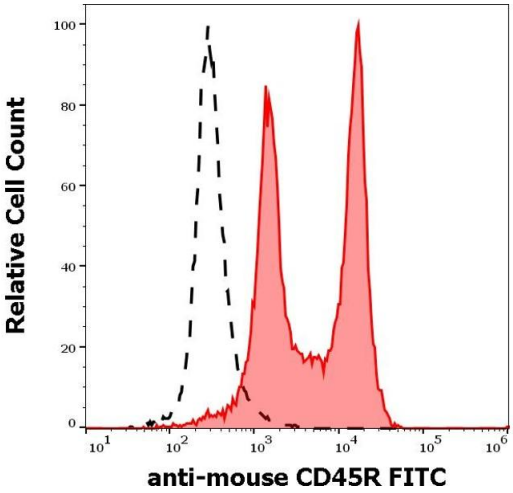
Flow Cytometry

Image 1. Flow cytometry surface staining pattern of murine splenocyte suspension stained using anti-mouse CD45R (RA3-6B2) FITC antibody (concentration in sample 1 µg/mL).



Flow Cytometry

Image 2. Surface staining of CD45R in murine splenocytes with anti-CD45R (RA3-6B2) FITC.



Flow Cytometry

Image 3. Separation of murine splenocytes stained using anti-mouse CD45R (RA3-6B2) FITC antibody (concentration in sample 1 µg/mL, red-filled) from murine splenocytes unstained by primary antibody (black-dashed) in flow cytometry analysis (surface staining).