

TECHNICAL DATA SHEET

CyFlow™ CD45R Low Endotoxin Anti-Hu/Ms; Clone RA3-6B2



CH203178

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD45R
Alternative Names	-
Clone	RA3-6B2
Clonality	monoclonal
Format	Low Endotoxin
Host / Isotype	Rat / IgG2a
Species Reactivity	Human Mouse, Cat
Negative Species Reactivity	_
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	Abelson murine leukemia virus-induced pre-B tumor cells

Specificity

The rat monoclonal antibody RA3-6B2 recognizes an epitope on CD45R antigen, 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.

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Application

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- · Immunoprecipitation
- · Immunohistochemistry
- Immunocytochemistry
- · Functional assays

Storage Buffer

The reagent is provided in azide-free phosphate buffered saline (PBS) solution, pH \approx 7.4; 0.2 µm filter sterilized. Endotoxin level is less than 0.01 EU/µg of the protein, as determined by the LAL test.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

CD45R (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.

References

- Watanabe Y, Akaike T: Activation signal induces the expression of B cell-specific CD45R epitope (6B2) on murine T cells. Scand J Immunol. 1994 May; 39(5):419-25. < PMID: 7514808 >
- Rada C, Ehrenstein MR, Neuberger MS, Milstein C: Hot spot focusing of somatic hypermutation in MSH2-deficient mice suggests two stages of mutational targeting. Immunity. 1998 Jul; 9(1):135-41.
 < PMID: 9697843 >
- Tsurui H, Nishimura H, Hattori S, Hirose S, Okumura K, Shirai T: Seven-color fluorescence imaging of tissue samples based on Fourier spectroscopy and singular value decomposition.
 J Histochem Cytochem. 2000 May; 48(5):653-62. < PMID: 10769049 >



- Cappione AJ, Pugh-Bernard AE, Anolik JH, Sanz I: Lupus IgG VH4.34 antibodies bind to a 220-kDa glycoform of CD45/B220 on the surface of human B lymphocytes. J Immunol. 2004 Apr 1; 172(7):4298-307. < PMID: 15034044 >
- Montecino-Rodriguez E, Leathers H, Dorshkind K: Identification of a B-1 B cell-specified progenitor.
 Nat Immunol. 2006 Mar; 7(3):293-301. < PMID: 16429139 >
- Rothaeusler K, Baumgarth N: Evaluation of intranuclear BrdU detection procedures for use in multicolor flow cytometry. Cytometry A. 2006 Apr; 69(4):249-59. < PMID: 16538653 >
- Lochhead RB, Sonderegger FL, Ma Y, Brewster JE, Cornwall D, Maylor-Hagen H, Miller JC, Zachary JF, Weis JH, Weis JJ: 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.
 J Immunol. 2012 Sep 1; 189(5):2488-501. < PMID: 22851707 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.	
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