

TECHNICAL DATA SHEET

CyFlow™ CD79b PE Anti-Hu; Clone CB3-1

REF BJ995982

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD79b
Alternative Names	IgB, B29
Clone	CB3-1
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	Fraction of Ig-associated molecules isolated from Ramos B cells

Specificity

The mouse monoclonal antibody CB3-1 recognizes an extracellular epitope of CD79b, a 38 kDa component of B cell receptor (BCR) complex.

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Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 10 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

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

CD79b (Ig β, B29) forms disulfide-linked heterodimer with CD79a (Ig α, MB1). They both are transmembrane proteins with extended cytoplasmic domains containing immunoreceptor tyrosine activation motives (ITAMs), and together with cell surface immunoglobulin they constitute B-cell antigen-specific receptor (BCR). CD79a and b are the first components of BCR that are expressed developmentally. They appear on pro-B cells in association with the endoplasmic reticulum chaperone calnexin. Subsequently, in pre-B cells, CD79 heterodimer is associated with λ5-VpreB surrogate immunoglobulin and later with antigen-specific surface immunoglobulins. CD79a/b complex interacts with Src-family tyrosine kinase Lyn, which phosphorylates its cytoplasmic ITAM motives to form docking sites for downstream signaling.

References

- Nakamura T, Kubagawa H, Cooper MD: Heterogeneity of immunoglobulin-associated molecules on human B cells identified by monoclonal antibodies. Proc Natl Acad Sci USA. 1992 Sep 15; 89(18):8522-6. < PMID: 1382292 >
- Garcia Vela J, Delgado I, Benito L, Monteserin M, Garcia Alonso L, Somolinos N, Andreu M, Oña F: CD79b expression in B cell chronic lymphocytic leukemia: its implication for minimal residual disease detection. Leukemia. 1999 Oct; 13(10):1501-5. < PMID: 10516749 >

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- Rassenti LZ, Kipps TJ: Expression of Ig-beta (CD79b) by chronic lymphocytic leukemia B cells that lack immunoglobulin heavy-chain allelic exclusion. *Blood*. 2000 Apr 15; 95(8):2725-7. < PMID: 10753858 >
- D'Arena G, Cascavilla N, Musto P, Colella Bisogno R, Pistolese G, Carotenuto M: CD79b expression in B-cell chronic lymphocytic leukemia. *Haematologica*. 2000 May; 85(5):556-7. < PMID: 10800181 >
- Matutes E: New additions to antibody panels in the characterisation of chronic lymphoproliferative disorders. *J Clin Pathol*. 2002 Mar; 55(3):180-3. < PMID: 11896067 >
- Dornan D, Bennett F, Chen Y, Dennis M, Eaton D, Elkins K, French D, Go MA, Jack A, Junutula JR, Koeppen H, Lau J, McBride J, Rawstron A, Shi X, Yu N, Yu SF, Yue P, Zheng B, Ebens A, Polson AG: Therapeutic potential of an anti-CD79b antibody-drug conjugate, anti-CD79b-vc-MMAE, for the treatment of non-Hodgkin lymphoma. *Blood*. 2009 Sep 24; 114(13):2721-9. < PMID: 19633198 >
- Zheng B, Fuji RN, Elkins K, Yu SF, Fuh FK, Chuh J, Tan C, Hongo JA, Raab H, Kozak KR, Williams M, McDorman E, Eaton D, Ebens A, Polson AG: In vivo effects of targeting CD79b with antibodies and antibody-drug conjugates. *Mol Cancer Ther*. 2009 Oct; 8(10):2937-46. < PMID: 19808977 >

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

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