

1F-676-T100

## Monoclonal Antibody to CD79b Fluorescein (FITC) conjugated (100 tests)

Clone: CB3-1

**Isotype:** Mouse IgG1

Specificity: The mouse monoclonal antibody CB3-1 recognizes an extracellular epitope of

CD79b (CD79 beta, Ig beta), an approximately 38 kDa component of B cell

receptor (BCR) complex. HLDA VI.; WS Code CD79.1

Regulatory Status: RUO

Immunogen: Fraction of Ig-associated molecules isolated from Ramos B cells

Species Reactivity: Human

**Preparation:** The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under

optimum conditions. The reagent is free of unconjugated FITC and adjusted for

direct use. No reconstitution is necessary.

Storage Buffer: The reagent is provided in stabilizing phosphate buffered saline (PBS) solution

containing 15mM sodium azide.

Storage / Stability: Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not

use after expiration date stamped on vial label.

**Usage:** The reagent is designed for Flow Cytometry analysis of human blood cells using 4

μl reagent / 100 μl of whole blood or 10° cells in a suspension.

The content of a vial (0.4 ml) is sufficient for 100 tests.

**Expiration:** See vial label

**Lot Number:** See vial label

Background: CD79b (Ig beta, B29) forms disulfide-linked heterodimer with CD79a (Ig alpha,

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 lambda5-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.



## PRODUCT DATA SHEET

## References:

\*Nakamura T, Kubagawa H, Cooper MD: Heterogeneity of immunoglobulin-associated molecules on human B cells identified by monoclonal antibodies. Proc Natl Acad Sci U S A. 1992 Sep 15;89(18):8522-6.

\*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.

\*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.

\*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.

\*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.

\*Matutes E: New additions to antibody panels in the characterisation of chronic lymphoproliferative disorders. J Clin Pathol. 2002 Mar;55(3):180-3.

\*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.

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