







# Anti-Human CD79a (HM57)

|  |  |  |  | [A]        |  |
|---|---|---|---|------------|---|
| FITC  | 79AF-100T   | 100 test  | 20 µL/test  | 0,05 mg/ml |  |
| PE  | 79APE-100T  | 100 test  | 20 µL/test  | 0,05 mg/ml |   |
| APC   | 79AA-100T   | 100 test  | 20 µL/test  | 0,05 mg/ml |   |

## 1. PRODUCT DESCRIPTION

**Clone:** HM57;  
**Isotype:** IgG1;  
**Tested application:** flow cytometry;  
**Immunogen:** The anti-CD79a monoclonal antibody derives from synthetic peptide corresponding to 202-216 amino acid sequence of human mb-1;  
**Species reactivity:** Human;  
**Storage instruction:** store in the dark at 2-8 °C;  
**Storage buffer:** aqueous buffered solution containing protein stabilizer and 0.09% sodium azide (NaN<sub>3</sub>);  
**Recommended usage:** Immunostep's CD79a, clone HM57, is a monoclonal antibody intended for the identification and enumeration of B lymphocytes using flow cytometry. This reagent is effective for direct immunofluorescence staining of human tissue for flow cytometric analysis using 1 test for 10<sup>6</sup> cells;  
**Presentation:** liquid;  
**Source:** Supernatant proceeding from an in vitro cell culture of a cell hybridoma;  
**Purification:** Affinity chromatography;  
**Other names:** Mb-1, Igα;  
**Gene ID:** 973;  
**Molecular weight:** 47 kDa.

## 2. ANTIGEN DETAILS

**Large description:** This antibody reacts with the CD79a-antigen. CD79a associates with CD79b to form part of the B-cell receptor complex. It has been suggested that CD79a may play a role in mediating the transport of IgM to the cell surface. This antibody has been found to react on permeabilized A20 cells (mouse B cell line). CD79a (Ig alpha, MB1) forms disulfide-linked heterodimer with CD79b (Ig beta). 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. At the plasma cell stage, CD79a is present as an intracellular component. CD79a/b complex interacts with Src-family tyrosine kinase Lyn, which phosphorylates its cytoplasmic ITAM motives to form docking sites for downstream signaling.<sup>[1-3]</sup>

## 3. WARRANTY

Warranted only to conform to the quantity and contents stated on the label or in the product labelling at the time of delivery to the customer. Immunostep disclaims hereby other warranties.

Immunostep's sole liability is limited to either the replacement of the products or refund of the purchase price.

## 4. ADDITIONAL INFORMATION

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## 5. REFERENCES

1. Sakaguchi N, Kashiwamura S, Kimoto M, Thalmann P, Melchers F. B lymphocyte lineage-restricted expression of mb-1, a gene with CD3-like structural properties. EMBO J1988 Nov;7(11):3457-64.
2. Mason DY, Cordell JL, Tse AG, van Dongen JJ, van Noesel CJ, Micklem K, et al. The IgM-associated protein mb-1 as a marker of normal and neoplastic B cells. J Immunol1991 Dec 01;147(11):2474-82.
3. Schlossman SF. Leucocyte typing V : white cell differentiation antigens : proceedings of the Fifth International Workshop and Conference : held in Boston, USA, 3-7 November, 1993. Oxford: Oxford University Press; 1995.

## 6. EXPLANATION OF SYMBOLS

|   |                                |
|---|--------------------------------|
|  | Form                           |
|  | Catalog reference              |
|  | Contains sufficient for > test |
|  | Quantity per test              |
|  | Regulatory Status              |
|  | Research Use Only              |
| [A]   | Concentration                  |
|  | Manufacturer                   |

## 7. MANUFACTURED BY:



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