

1F-530-T025

## Monoclonal Antibody to CD79a Fluorescein (FITC) conjugated (25 tests)

Clone: HM57

**Isotype:** Mouse IgG1

Specificity: The antibody HM57 interacts with CD79a (Ig alpha), a 40-45 kDa subunit of B cell

antigen-specific receptor (BCR) and its early developmental forms.

HLDA V; WS Code BC cB018 HLDA VI; WS Code BP 193 HLDA VI; WS Code BP 89 HLDA VI; WS Code B B103 HLDA VI; WS Code B CD79.4

Regulatory Status: RUO

Immunogen: Synthetic peptide corresponding to amino acids 202-216 of human CD79a

Species Reactivity: Human, Porcine, Mouse, Rat, Bovine, Equine (Horse), Guinea pig, Opossum,

Rabbit, Chicken, Other not determined

**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<sup>6</sup> cells in a suspension.

The content of a vial (0.1 ml) is sufficient for 25 tests.

Expiration: See vial label

Lot Number: See vial label

Background: 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.



## PRODUCT DATA SHEET

## References:

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\*Mason DY, Cordell JL, Brown MH, Borst J, Jones M, Pulford K, Jaffe E, Ralfkiaer E, Dallenbach F, Stein H, et al. CD79a: a novel marker for B-cell neoplasms in routinely processed tissue samples. Blood. 1995 Aug 15;86(4):1453-9.

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