TECHNICAL DATA SHEET

CyFlow™ CD79a PerCP-Cy5.5
Anti-Hu/Ms/Rt; Clone HM47

REF **BP912385**

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD79a
Alternative Names	IgA, MB-1, MB1
Clone	HM47
Clonality	monoclonal
Format	PerCP-Cy5.5
Host / Isotype	Mouse / IgG1
Species Reactivity	Human | Mouse | Rat, Non-Human Primates | Pig | Cow | Horse | Dog | Rabbit | Guinea pig | Chicken
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	Synthetic peptide corresponding to C terminal amino acids 208-222 of human CD79a

Specificity

The mouse monoclonal antibody HM57 recognizes CD79a, a 40-45 kDa subunit of B cell antigen-specific receptor (BCR) and its early developmental forms.

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Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 4 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension. The content of a vial (0.4 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

CD79a (Ig α, MB1) forms disulfide-linked heterodimer with CD79b (Ig β, B29). 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. 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.

References

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

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