

### 30-1528F: FITC Conjugated Anti-CD79a Monoclonal Antibody (Clone:HM47)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	HM47
<b>Application :</b>	FACS
<b>Reactivity :</b>	Human
<b>Conjugate :</b>	FITC
<b>Gene :</b>	CD79A
<b>Gene ID :</b>	973
<b>Uniprot ID :</b>	P11912
<b>Format :</b>	Purified
<b>Alternative Name :</b>	CD79A,IGA,MB1
<b>Isotype :</b>	Mouse IgG1
<b>Immunogen Information :</b>	Synthetic peptide corresponding to C terminal amino acids 208-222 of human CD79a

#### Description

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 Info

<b>Amount :</b>	100 Tests
<b>Purification :</b>	Purified antibody is conjugated with fluorescein isothiocyanate (FITC) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
<b>Content :</b>	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
<b>Storage condition :</b>	Store at 2-8°C protected from light. Do not freeze.

#### Application Note

Flow cytometry: The reagent is designed for analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 106 cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests. Intracellular staining.

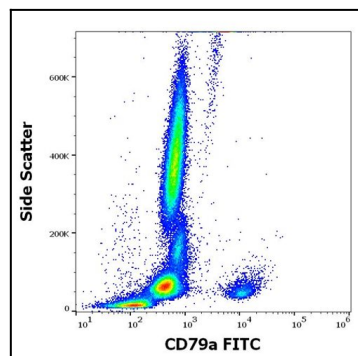


Figure 1: Flow cytometry intracellular staining pattern of human peripheral whole blood stained using anti-human CD79a (HM47) FITC antibody (4  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).

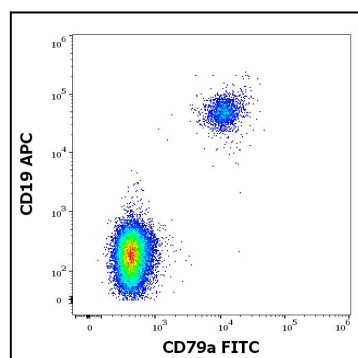


Figure 2: Flow cytometry multicolor intracellular staining pattern of human lymphocytes using anti-human CD79a (HM47) FITC antibody (4  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood) and anti-human CD19 (LT19) APC antibody (10  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).

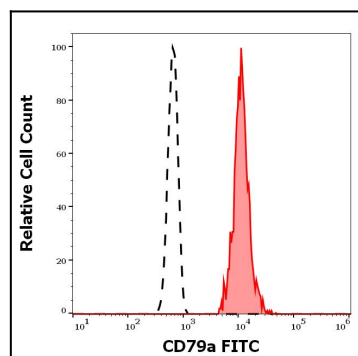


Figure 3: Separation of human CD19 positive CD79a positive lymphocytes (red-filled) from neutrophil granulocytes (black-dashed) in flow cytometry analysis (intracellular staining) of human peripheral whole blood stained using anti-human CD79a (HM47) FITC antibody (4  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).