

### 30-2758: Anti-Hu CD79a (Clone ZL7.4) PE

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	ZL7.4
<b>Application :</b>	FACS
<b>Reactivity :</b>	Human
<b>Conjugate :</b>	PE
<b>Gene :</b>	CD79A
<b>Gene ID :</b>	973
<b>Uniprot ID :</b>	P11912
<b>Alternative Name :</b>	CD79a molecule BCR alpha, Ig-alpha, MB-1, IGA
<b>Immunogen Information :</b>	IgM complex isolated from Daudi cells

#### 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.

**Specificity :** The mouse monoclonal antibody ZL7.4 interacts with extracellular domain of CD79a (Ig alpha), a 40-45 kDa subunit of B cell antigen-specific receptor (BCR) and its early developmental forms.

#### Product Info

<b>Amount :</b>	100 Tests
<b>Purification :</b>	Purified antibody is conjugated with R-phycoerythrin (PE) under optimum conditions. Unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
<b>Content :</b>	Storage Buffer: Stabilizing Tris buffered saline (TBS), pH 8.0, 15 mM sodium azide
<b>Storage condition :</b>	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

#### Application Note

**Flow cytometry:** The reagent is designed for analysis of human blood cells using 10  $\mu$ l reagent / 100  $\mu$ l of whole blood or  $10^6$  cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests. Extracellular and intracellular staining.

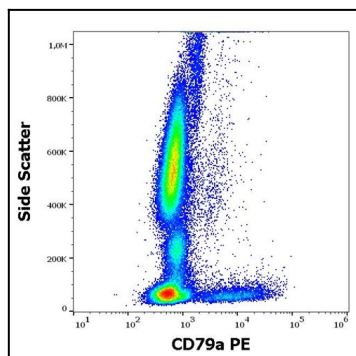


Figure 1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD79a (ZL7.4) PE antibody

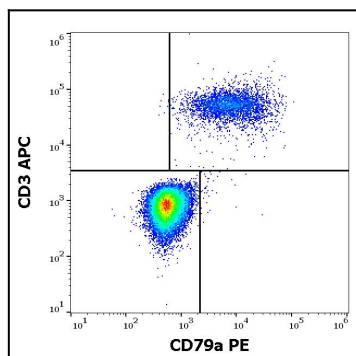


Figure 2: Flow cytometry multicolor surface staining of human lymphocytes stained using anti-human CD79a (ZL7.4) PE antibody and anti-human CD3 (UCHT1) APC antibody

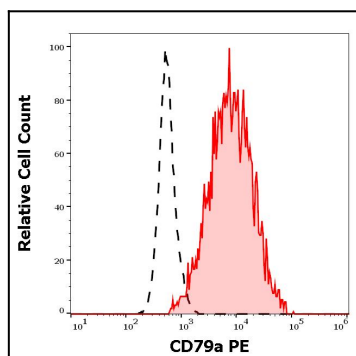


Figure 3: Separation of human CD79a positive B cells (red-filled) from CD79a negative lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD79a (ZL7.4) PE antibody