

### 30-2901: Anti-Hu CD19 PE-Cy™ 7

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	4G7
<b>Application :</b>	FACS
<b>Reactivity :</b>	Human
<b>Conjugate :</b>	PE/CY7
<b>Gene :</b>	CD19
<b>Gene ID :</b>	930
<b>Uniprot ID :</b>	P15391
<b>Alternative Name :</b>	B4, Leu-12, CVID3
<b>Isotype :</b>	Mouse IgG1 kappa
<b>Immunogen Information :</b>	Human CCL (chronic lymphocytic leukemia) cells

#### Description

Specificity: The mouse monoclonal antibody 4G7 recognizes an extracellular epitope of human CD19.

CD19 is a transmembrane glycoprotein of Ig superfamily expressed by B cells from the time of heavy chain rearrangement until plasma cell differentiation. It forms a tetrameric complex with CD21 (complement receptor type 2), CD81 (TAPA-1) and Leu13. Together with BCR (B cell antigen receptor), this complex signals to decrease B cell threshold for activation by the antigen. Besides being signal-amplifying coreceptor for BCR, CD19 can also signal independently of BCR coligation and it turns out to be a central regulatory component upon which multiple signaling pathways converge. Mutation of the CD19 gene results in hypogammaglobulinemia, whereas CD19 overexpression causes B cell hyperactivity.

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#### Product Info

<b>Amount :</b>	100 tests
<b>Purification :</b>	Purified antibody is conjugated with activated tandem dye of R-phycoerythrin-cyanine 7 (PE-Cy <sup>®</sup> 7) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
<b>Content :</b>	Formulation: Stabilizing phosphate-buffered saline (PBS), pH 7.4, 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 4  $\mu$ l reagent / 100  $\mu$ l of whole blood or  $10^6$  cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

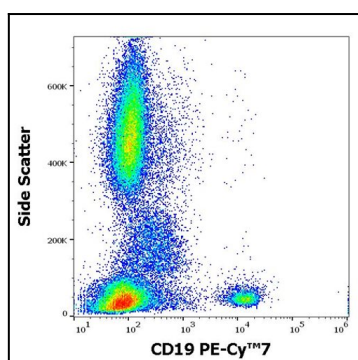


Figure 1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD19 (4G7) PE-Cy™7 antibody (4  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).

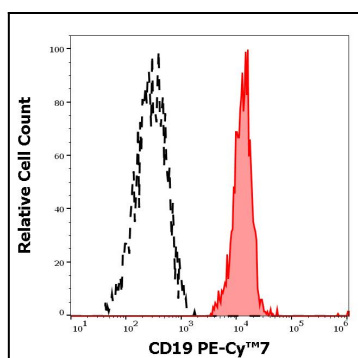


Figure 2: Separation of human CD19 positive lymphocytes (red-filled) from monocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD19 (4G7) PE-Cy™7 antibody (4  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).