

30-2901: Anti-Hu CD19 PE-Cy™ 7

Clonality :	Monoclonal
Clone Name :	4G7
Application :	FACS
Reactivity :	Human
Conjugate :	PE/CY7
Gene :	CD19
Gene ID :	930
Uniprot ID :	P15391
Alternative Name :	B4, Leu-12, CVID3
Isotype :	Mouse IgG1 kappa
Immunogen Information :	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

Amount :	100 tests
Purification :	Purified antibody is conjugated with activated tandem dye of R-phycoerythrin-cyanine 7 (PE-Cyâ„¢7) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
Content :	Formulation: Stabilizing phosphate-buffered saline (PBS), pH 7.4, 15 mM sodium azide
Storage condition :	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 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.

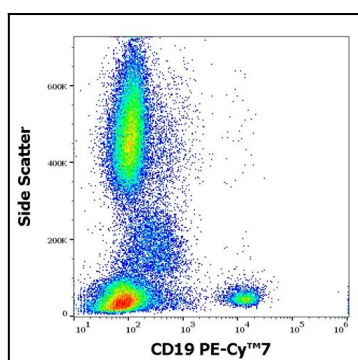


Figure 1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD19 (4G7) PE-Cy™ 7 antibody (4 1/4 l reagent / 100 1/4 l of peripheral whole blood).

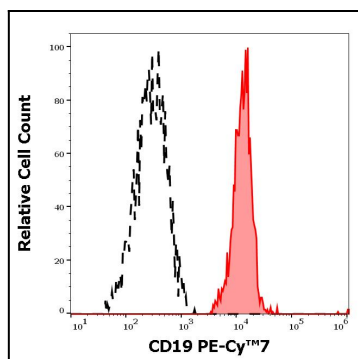


Figure 2: Separation of human CD19 positive lymphocytes (red-filled) from monocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD19 (4G7) PE-Cy™ 7 antibody (4 1/4 l reagent / 100 1/4 l of peripheral whole blood).