

30-1193-PE-Cy5: Anti-CD19 Monoclonal Antibody (Clone:LT19)-PE-Cy5 Conjugated

Clonality :	Monoclonal
Clone Name :	LT19
Application :	FACS
Reactivity :	Human
Conjugate :	R-PE/CY5
Gene :	CD19
Gene ID :	930
Uniprot ID :	P15391
Alternative Name :	CD19
Isotype :	Mouse IgG1
Immunogen Information :	Daudi human Burkitt lymphoma cell line

Description

Specificity: The antibody LT19 reacts with an extracellular epitope of CD19 (B4), a 95 kDa type I transmembrane glycoprotein (immunoglobulin superfamily) expressed on B lymphocytes and follicular dendritic cells; it is lost on plasma cells.

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.

Product Info

Amount :	100 tests
Purification :	Purified antibody is conjugated with activated tandem dye of R-phycoerythrin-cyanine 5 (PE-Cy [™] 5) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
Content :	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.

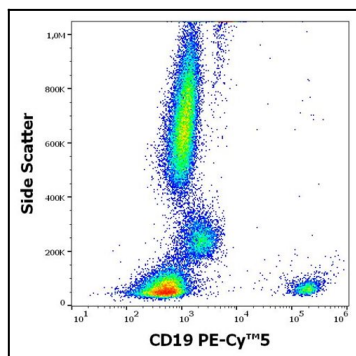


Figure 1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD19 (LT19) PE-Cy5 antibody (concentration in sample 0.19 µg/ml).

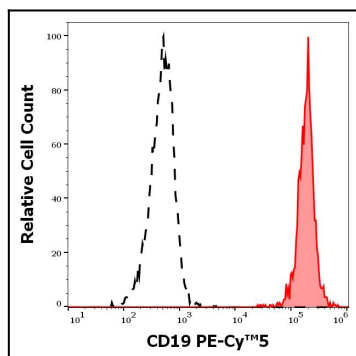


Figure 2: Separation of human CD19 positive B cells (red-filled) from CD19 negative lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD19 (LT19) PE-Cy5 antibody (concentration in sample 0.19 µg/ml).