

TECHNICAL DATA SHEET

CyFlow™ CD19 Purified Anti-Hu; Clone 4G7

REF BS738572

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD19
Alternative Names	B4
Clone	4G7
Clonality	monoclonal
Format	Purified
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	Human CCL (chronic lymphocytic leukemia) cells

Specificity

The mouse monoclonal antibody 4G7 recognizes CD19 antigen, a 95 kDa type I transmembrane glycoprotein of immunoglobulin superfamily, expressed on B lymphocytes and follicular dendritic cells; it is lost on plasma cells.

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Application

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Immunocytochemistry

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH $\approx$ 7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

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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The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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