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AM26006BT-N Monoclonal Antibody to CD19 - Biotin

Alternate names:	B-cell marker, B-lymphocyte surface antigen B4, Differentiation antigen CD19, Leu-12
Quantity:	0.1 mg
Concentration:	1.0 mg/ml
Background:	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 treshold 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.
Uniprot ID:	P15391
NCBI:	NP_001171569.1
GeneID:	930
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10B (for use in human samples)
Clone:	4G7
Immunogen:	Human CCL (chronic lymphocytic leukemia) cells
Format:	**State:** Liquid purified Ig fraction **Buffer System:** PBS **Preservatives:** 15 mM sodium azide **Label:** Biotin – Conjugated with Biotin-LC-NHS under optimum conditions. The reagent is free of unconjugated biotin.
Applications:	Indirect immunofluorescence analysis by **Flow Cytometry**. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	The mouse monoclonal antibody 4G7 recognizes CD19 (B4), a 95 kDa type I transmembrane glycoprotein of immunoglobulin superfamily, expressed on B lymphocytes and follicular dendritic cells; it is lost on plasma cells.
Species Reactivity:	**Tested:** Human
Storage:	Store at 2-8°C. Do not freeze. Shelf life: One year from despatch.
General Readings:	1. Muench MO, Roncarolo MG, Namikawa R. Phenotypic and functional evidence for the expression of CD4 by hematopoietic stem cells isolated from human fetal liver. Blood. 1997 Feb 15;89(4):1364-75. PubMed PMID: 9028960. 2. Stockmeyer B, Dechant M, van Egmond M, Tutt AL, Sundarapandiyan K, Graziano

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Pictures:

Surface staining of human peripheral blood leukocytes with anti-human CD19 (4G7) purified.