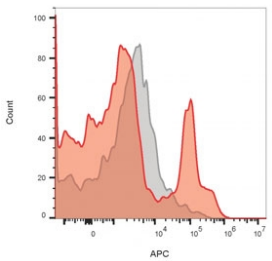
CD19 Antibody for FACS [clone PDR134] (V8223)

Catalog No.	Formulation	Size
V8223-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8223-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8223SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgM, kappa
Clone Name	PDR134
Purity	PEG precipitation
UniProt	P15391
Localization	Cell surface, cytoplasmic
Applications	Flow cytometry: 1-2ug/10^6 cells in 0.1ml Immunofluorescence: 1-2ug/ml Western blot: 1-2ug/ml
Limitations	This CD19 antibody is available for research use only.



CD19 Antibody for FACS PBMC. Flow cytometry analysis human peripheral blood mononuclear cells with CD19 antibody. Lymphocyte-gated human PBMCs show a distinct right-shifted population in the APC channel (red histogram) corresponding to CD19-positive B cells, while unstained control cells (gray histogram) display baseline fluorescence. The clear separation between unstained and antibody-stained populations confirms specific detection of CD19 (Cluster of Differentiation 19) on circulating B lymphocytes.

Description

CD19 antibody recognizes CD19, a B cell-specific type I transmembrane glycoprotein that functions as a central coreceptor in B cell receptor signaling. CD19 Antibody for FACS (Clone PDR134) is developed for reliable detection of CD19 on the surface of B lymphocytes in flow cytometry-based applications. CD19 is a member of the immunoglobulin superfamily and is expressed from early pro-B cell stages through mature peripheral B lymphocytes, where it localizes to the plasma membrane. By forming a signaling complex with CD21 and CD81, CD19 amplifies antigen receptor-mediated signaling and lowers the activation threshold required for B cell activation.

The CD19 gene is located on chromosome 16p11.2 and encodes a protein containing two extracellular immunoglobulin-like domains, a single transmembrane region, and a cytoplasmic tail enriched in tyrosine residues that become phosphorylated upon B cell stimulation. These phosphorylation events recruit signaling molecules such as PI3K and adaptor proteins, driving downstream pathways that regulate B cell proliferation, differentiation, and survival. CD19 Antibody for FACS (Clone PDR134) supports investigations into B cell development, activation status, and immune profiling in both normal and disease contexts.

In normal tissues and peripheral blood, CD19 expression is restricted to B lineage cells within bone marrow, lymph node, tonsil, spleen, and circulating B cells. Plasma cells typically show reduced or absent CD19 expression, reflecting terminal differentiation. Because of its lineage specificity and stable surface expression, CD19 serves as a reliable pan-B cell marker for flow cytometric identification and characterization of B cell subsets.

Aberrant CD19 expression is a defining feature of most B cell malignancies, including B cell acute lymphoblastic leukemia, chronic lymphocytic leukemia, and various non-Hodgkin lymphomas. CD19 is also a major therapeutic target in immunotherapy strategies such as chimeric antigen receptor T cell approaches. Accurate detection of CD19-positive cells is therefore critical for studies of tumor immunophenotyping, immune monitoring, and therapeutic development.

Clone PDR134 is a monoclonal antibody designed to provide specific and reproducible detection of CD19 in flow cytometry experiments. CD19 Antibody for FACS (Clone PDR134) enables clear discrimination of CD19-positive B cells from other leukocyte populations, supporting precise immunophenotypic analysis and B cell-focused research applications.

Researchers studying B cell markers and immune cell signaling may also be interested in our CD19 Antibody / B Cell Marker Antibody page, featuring a Protein Microarray Validated recombinant monoclonal antibody for B lymphocyte detection and immunology research.

Application Notes

Optimal dilution of the CD19 antibody should be determined by the researcher.

Immunogen

Pokeweek-stimulated Daudi and Raji cells were used as the immunogen for the CD19 for FACS antibody.

Storage

Store the CD19 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

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