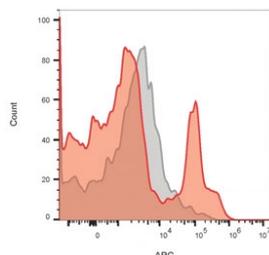


## CD19 Antibody for FACS [clone PDR134] (V8223)

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

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



Flow cytometry analysis of CD19 Antibody for FACS (clone PDR134) in human peripheral blood mononuclear cells. 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.

## Application Notes

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

## Immunogen

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

## Storage

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