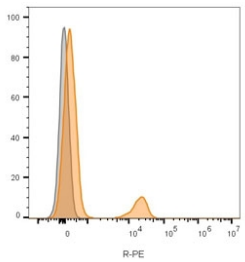
CD19 Antibody B-lymphocyte Marker [clone CVID3/155] (V2388)

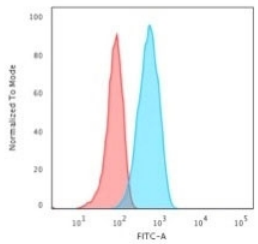
Catalog No.	Formulation	Size
V2388-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2388-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2388SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

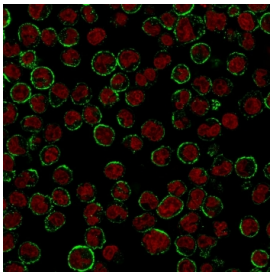
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CVID3/155
Purity	Protein G affinity chromatography
UniProt	P15391
Localization	Cell surface, cytoplasmic
Applications	Flow Cytometry : 1-2ug/10^6 cells Immunofluorescence : 1-2ug/ml
Limitations	This CD19 antibody is available for research use only.



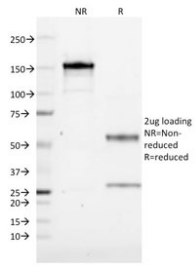
Flow cytometry analysis of CD19 Antibody B-lymphocyte marker (clone CVID3/155) in human peripheral blood mononuclear cells. Lymphocyte-gated human PBMCs show a distinct right-shifted population in the R-PE channel (orange histogram) corresponding to CD19-positive B cells, while unstained control cells (gray histogram) demonstrate baseline fluorescence. The clear separation between unstained and antibody-stained populations confirms specific detection of CD19 (Cluster of Differentiation 19) on circulating B lymphocytes.



Flow cytometry testing of human Raji cells with CD19 antibody (clone CVID3/155); Red=isotype control, Blue= anti-CD19 antibody.



Immunofluorescence analysis of CD19 Antibody B-lymphocyte marker (clone CVID3/155) in human Raji cells. CD19 (Cluster of Differentiation 19) shows distinct membranous green fluorescence outlining the surface of B lymphocyte-derived Raji cells, consistent with plasma membrane localization. Nuclei are counterstained with Reddot (red). The staining pattern confirms surface expression of CD19 on human B cells.



SDS-PAGE analysis of purified, BSA-free CD19 antibody (clone CVID3/155) as confirmation of integrity and purity.

Description

CD19 antibody recognizes CD19, a B-lymphocyte surface glycoprotein that functions as a central coreceptor in B cell receptor signaling. CD19 Antibody B-lymphocyte marker (Clone CVID3/155) is developed for specific identification of B lineage cells in research applications focused on lymphoid biology and hematologic disease. 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 type I transmembrane 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, promoting downstream pathways that regulate B cell proliferation, differentiation, and survival. CD19 Antibody B-lymphocyte marker (Clone CVID3/155) supports investigations into normal B cell development as well as dysregulated signaling observed in immune deficiencies and lymphoid malignancies.

In normal tissues, CD19 expression is restricted to B lineage cells within bone marrow, lymph node, tonsil, and spleen. Terminally differentiated plasma cells typically exhibit reduced or absent CD19 expression, reflecting progression through late stages of B cell maturation. Because of its lineage specificity and stable membrane expression, CD19 serves as a reliable pan-B cell marker in immunologic and translational research settings.

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

Clone CVID3/155 is a mouse monoclonal antibody designed to provide specific and reproducible detection of CD19

protein. As a monoclonal reagent, it recognizes a defined epitope, supporting consistent staining patterns and minimal background. CD19 Antibody B-lymphocyte marker (Clone CVID3/155) provides dependable performance for researchers investigating B cell distribution, immune regulation, and B cell-driven disease processes.

Application Notes

The stated application concentrations are suggested starting amounts. Variations in protocols, secondaries and substrates may require the CD19 antibody to be titered up or down for optimal performance.

Immunogen

Human CD19 recombinant protein was used as immunogen for this CD19 Antibody B-lymphocyte Marker.

Storage

CD19 antibody with azide can be stored at 2-8oC. The azide-free format should be aliquoted and stored at -20oC or colder.