

PE/Cy7 Anti-mouse CD19 Antibody *1D3*Catalog number: 101941M0, 101941M1, 101941M2
Unit size: 25 tests, 100 tests, 500 tests**Product Details**

Storage Conditions	2-8°C with minimized light exposure. Do not freeze.
Expiration Date	12 months upon receiving
Concentration	0.1 mg/mL
Formulation	Phosphate-buffered saline (PBS, pH 7.2), 0.09% sodium azide, 0.2% (w/v) BSA

Antibody Properties

Species Reactivity	Mouse
Class	Primary
Clonality	Monoclonal
Host	Rat
Isotype	Rat IgG2a, κ
Immunogen	CD19 (B4)
Clone	1D3
Conjugate	PE/Cy7

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with PE/Cy7 under optimal conditions
Application	Flow Cytometry (FACS)

Spectral Properties

Conjugate	PE/Cy7
Excitation Wavelength	566 nm
Emission Wavelength	778 nm

Applications

1D3 is an anti-mouse monoclonal antibody that is specific for the CD19 antigen. CD19 (sometimes referred to as B4) is a 95 kD transmembrane glycoprotein that is expressed on the surface of cells like B cells and stem cells. CD19 plays a role in essential cellular pathways, namely, the antigen receptor-mediated signaling pathway and B cell receptor signaling pathway. In addition, in some organisms, it is an enhancer of release of sequestered calcium ion into cytosol, is a promoter of protein kinase B signaling and is a positive regulator of phosphatidylinositol 3-kinase activity. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands like CD225, CD81, PI3-kinase and fyn. CD19 is a very popular antibody target, with over 36000 publications in the last decade. CD19 has been widely used in costimulatory molecules and immunology research, commonly serving as a phenotypic marker for differentiating cell types in flow cytometric

applications. This antibody was purified through affinity chromatography and conjugated to PE/Cy7 (ex/em = 566/778 nm). It is compatible with the 561 nm laser and 780/60 nm bandpass filter (for example, as in the Agilent Technologies NovoCyte Quanteon).