AAT Bioquest®

PE/Cy5 Anti-human CD19 Antibody *4G7*

Catalog number: 101931N0, 101931N1, 101931N2
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	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse igg1
Immunogen	CD19 (B4)
Clone	4G7
Conjugate	PE/Cy5

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with PE/Cy5 under optimal conditions
Application	Flow Cytometry (FACS)

Spectral Properties

Conjugate	PE/Cy5
Excitation Wavelength	565 nm
Emission Wavelength	666 nm

Applications

The 4G7 monoclonal antibody binds with human CD19, a 95 kD transmembrane protein commonly expressed on the surface of B cells and lymphocytes. CD19 plays a role in essential cellular pathways, for example, the antigen receptor-mediated signaling pathway and B cell receptor signaling pathway. Moreover, in some organisms, it acts to positively regulate phosphatidylinositol 3-kinase activity, is an enhancer of protein kinase B signaling and is involved in the positive regulation of release of sequestered calcium ion into cytosol. From a research standpoint, it is of biological interest due to its association with important macromolecules/ligands such as Fyn and PI3-kinase. CD19 is a very popular antibody target, with over 30000 publications in the last decade. CD19 is essential for 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/Cy5 (ex/em = 565/666 nm). It is compatible with the 561 nm laser and 660/20 nm bandpass filter (for example, as in the Agilent Technologies NovoCyte).