

PE/XFD610 Anti-human CD19 Antibody *4G7*

Catalog Number: 101931P0,
101931P1, 101931P2
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	Lot specific (please consult certificate of analysis for given lot)
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/AF610

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with PE/AF610 under optimal conditions
Application	Flow Cytometry (FACS)
Recommended Dilutions	For flow cytometry applications, the suggested concentration is at 5 uL/million cells in 100 uL staining buffer. For the best performance of each application, the optimal concentration of this reagent needs to be carefully determined.
	<i>*The suggested working dilution is provided as a guide only. It is recommended that the users titrates the product for use in their tests using proper positive and negative controls.</i>

Spectral Properties

Conjugate	PE/AF610
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Excitation Wavelength 565 nm

Emission Wavelength 627 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/XFD610 (ex/em = 567/627 nm). XFD610 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 610 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 561 nm laser and 610/20 nm bandpass filter (for example, as in the BD FACSCelesta™).