

PE/XFD700 Anti-human CD19 Antibody *4G7*

Catalog Number: 101931Q0,
101931Q1, 101931Q2
Unit Size: 25 tests, 100 tests, 500 tests

Product Details

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| 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

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| Species Reactivity | Human |
| Class | Primary |
| Clonality | Monoclonal |
| Host | Mouse |
| Isotype | Mouse IgG1 |
| Immunogen | CD19 (B4) |
| Clone | 4G7 |
| Conjugate | PE/AF700 |

Biological Properties

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| Preparation | Antibody purified by affinity chromatography and then conjugated with PE/AF700 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 user titrates the product for use in their tests using proper positive and negative controls.</i> |

Spectral Properties

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| Conjugate | PE/AF700 |
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Excitation Wavelength 565 nm

Emission Wavelength 721 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/XFD700 (ex/em = 566/721 nm). XFD700 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 700 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 561 nm laser and 695/40 nm bandpass filter (for example, as in the Agilent Technologies NovoCyte).