

## PE/XFD610 Anti-human CD19 Antibody \*HI19a\*

Catalog Number: 10190100,  
10190101, 10190102  
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	HI19a
Conjugate	PE/AF610

### Biological Properties

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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

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Conjugate	PE/AF610
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Excitation Wavelength 565 nm

Emission Wavelength 627 nm

## Applications

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HI19a is an anti-human monoclonal antibody that targets the CD19 antigen. CD19 (also known as T-cell surface antigen Leu-12 or B-lymphocyte surface antigen B4) is a 95 kD transmembrane glycoprotein that is found on the surface of cells like B cells and stem cells. CD19 plays a role in critical cellular pathways, in particular, the antigen receptor-mediated signaling pathway and B cell receptor signaling pathway. Furthermore, in certain organisms, it plays a role in the upregulation of phosphatidylinositol 3-kinase activity, positively regulates release of sequestered calcium ion into cytosol and plays a role in the upregulation of protein kinase B signaling. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands such as CD81 and Leu-13. CD19 is a very popular antibody target, with over 36000 publications in the last decade. CD19 is frequently used in flow cytometry applications as a phenotypic marker for differentiation of cell types, specifically in the study of immunology and costimulatory molecules. 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 615/20 nm bandpass filter (for example, as in the Agilent Technologies NovoCyte).