

PE/XFD700 Anti-human CD21 Antibody *HI21a*

Catalog Number: 102101P0,
102101P1, 102101P2
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 IgG2a
Immunogen	CD21 (CR2, C3dR, Epstein-Barr virus receptor)
Clone	HI21a
Conjugate	PE/AF700

Biological Properties

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 users titrates the product for use in their tests using proper positive and negative controls.</i>

Spectral Properties

Conjugate	PE/AF700
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Excitation Wavelength 565 nm

Emission Wavelength 721 nm

Applications

The HI21a monoclonal antibody recognizes human CD21, a 145 kD transmembrane glycoprotein frequently expressed on the surface of thymocytes and dendritic cells. CD21 plays a role in vital cellular pathways, namely, the complement activation, classical pathway. In addition, it has been associated with vital biological processes like immune response, specifically innate immune response. From a research standpoint, it is of biological interest due to its association with essential macromolecules/ligands such as CD19, CD23 and C3d. CD21 is a fairly uncommon antibody target, with a little more than 5000 publications in the last decade. Even still, CD21 is essential for complement, innate immunity and immunology research, often 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 710/50 nm bandpass filter (for example, as in the BD Special Order LSRFortessa™ Cell Analyzer).