

## XFD700 Anti-human CD21 Antibody \*HI21a\*

Catalog Number: 102101A0, 102101A1

Unit Size: 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 IgG2a
Immunogen	CD21 (CR2, C3dR, Epstein-Barr virus receptor)
Clone	HI21a
Conjugate	AF700

### Biological Properties

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Appearance	Dark blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF700 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging
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 AF700

Excitation Wavelength 696 nm

Emission Wavelength 719 nm

## Applications

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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 XFD700 (ex/em = 696/719 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).