

## APC/XFD750 Anti-human CD21 Antibody \*HI21a\*

Catalog Number: 102101E0,  
102101E1, 102101E2  
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 IgG2a                                   |
| Immunogen          | CD21 (CR2, C3dR, Epstein-Barr virus receptor) |
| Clone              | HI21a   |
| Conjugate          | APC/AF750                                     |

### Biological Properties

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|                       |  |
|-----------------------|--|
| Preparation           | Antibody purified by affinity chromatography and then conjugated with APC/AF750 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 | APC/AF750 |
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Excitation Wavelength 651 nm

Emission Wavelength 785 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 APC/XFD750 (ex/em = 756/785 nm). XFD750 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 750 (Alexa Fluor® is the trademark of Thermo Fisher).