

**XFD647 Anti-human CD21 Antibody *HI21a,
XFD647 Same Structure to Alexa Fluor™
647***Catalog number: 10210180, 10210181
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 | 0.1 mg/mL |
| 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 | AF647 |

Biological Properties

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|-------------|--|
| Appearance | Dark blue liquid |
| Preparation | Antibody purified by affinity chromatography and then conjugated with AF647 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging |

Spectral Properties

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| Conjugate | AF647 |
| Excitation Wavelength | 650 nm |
| Emission Wavelength | 671 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 XFD647 (ex/em = 650/671 nm). XFD647 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 647 (Alexa Fluor® is the trademark of ThermoFisher). It is compatible with the 642 nm laser and 702/87 nm bandpass filter (for example, as in the Luminex Amnis CellStream).