

**XFD680 Anti-human CD21 Antibody \*HI21a,  
XFD680 Same Structure to Alexa Fluor™  
680\***Catalog number: 10210190, 10210191  
Unit size: 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	0.1 mg/mL
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	AF680

**Biological Properties**

Appearance	liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF680 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

**Spectral Properties**

Conjugate	AF680
Excitation Wavelength	681 nm
Emission Wavelength	704 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 XFD680 (ex/em = 681/704 nm). XFD680 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 680 (Alexa Fluor® is the trademark of ThermoFisher). It is compatible with the 642 nm laser and 702/85 nm bandpass filter (for example, as in the Luminex Amnis ImageStream).