

**XFD680 Anti-human CD19 Antibody \*HI19a,  
XFD680 Same Structure to Alexa Fluor™  
680\***Catalog number: 10190190, 10190191  
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 IgG1
Immunogen	CD19 (B4)
Clone	HI19a
Conjugate	AF680

**Biological Properties**

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

**Spectral Properties**

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Conjugate	AF680
Excitation Wavelength	681 nm
Emission Wavelength	704 nm

**Applications**

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HI19a is an anti-human monoclonal antibody that targets the CD19 antigen. CD19 (also known as T-cell surface antigen Leu-12 or B-lymphocyte surface antigen B4) is a 95 kD transmembrane glycoprotein that is found on the surface of cells like B cells and stem cells. CD19 plays a role in

critical cellular pathways, in particular, the antigen receptor-mediated signaling pathway and B cell receptor signaling pathway. Furthermore, in certain organisms, it plays a role in the upregulation of phosphatidylinositol 3-kinase activity, positively regulates release of sequestered calcium ion into cytosol and plays a role in the upregulation of protein kinase B signaling. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands such as CD81 and Leu-13. CD19 is a very popular antibody target, with over 36000 publications in the last decade. CD19 is frequently used in flow cytometry applications as a phenotypic marker for differentiation of cell types, specifically in the study of immunology and costimulatory molecules. 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 702/87 nm bandpass filter (for example, as in the Luminex Amnis CellStream).