

**XFD488 Anti-human CD19 Antibody *4G7,
XFD488 Same Structure to Alexa Fluor™
488***Catalog number: 10193150, 10193151
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 igg1
Immunogen	CD19 (B4)
Clone	4G7
Conjugate	AF488

Biological Properties

Appearance	Red liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF488 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	AF488
Excitation Wavelength	499 nm
Emission Wavelength	520 nm

Applications

The 4G7 monoclonal antibody binds with human CD19, a 95 kD transmembrane protein commonly expressed on the surface of B cells and lymphocytes. CD19 plays a role in essential cellular pathways, for example, the antigen receptor-mediated signaling pathway and B cell receptor

signaling pathway. Moreover, in some organisms, it acts to positively regulate phosphatidylinositol 3-kinase activity, is an enhancer of protein kinase B signaling and is involved in the positive regulation of release of sequestered calcium ion into cytosol. From a research standpoint, it is of biological interest due to its association with important macromolecules/ligands such as Fyn and PI3-kinase. CD19 is a very popular antibody target, with over 30000 publications in the last decade. CD19 is essential for immunology research, commonly serving as a phenotypic marker for differentiating cell types in flow cytometric applications. This antibody was purified through affinity chromatography and conjugated to XFD488 (ex/em = 499/520 nm). XFD488 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 488 (Alexa Fluor® is the trademark of ThermoFisher). It is compatible with the 488 nm laser and 528/46 nm bandpass filter (for example, as in the Luminex Amnis CellStream).