

**XFD594 Anti-human CD19 Antibody *HI19a,
XFD594 Same Structure to Alexa Fluor™
594***Catalog number: 10190170, 10190171
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	HI19a
Conjugate	AF594

Biological Properties

Appearance	Purple liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF594 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	AF594
Excitation Wavelength	590 nm
Emission Wavelength	618 nm

Applications

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 XFD594 (ex/em = 590/618 nm). XFD594 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 594 (Alexa Fluor® is the trademark of ThermoFisher). It is compatible with the 592 nm laser and 610/30 nm bandpass filter (for example, as in the Luminex Amnis ImageStream).