

**XFD680 Anti-human CD16 Antibody *3G8,
XFD680 Same Structure to Alexa Fluor™
680***Catalog number: 10161190, 10161191
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
Immunogen	CD16a (FCRIIIA)
Clone	3G8
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 3G8 monoclonal antibody recognizes human CD16a, a 50 - 65 kD transmembrane protein typically found on the surface of macrophages, natural killer cells, dendritic cells, monocytes and neutrophils. CD16 is a member of key cellular pathways, namely, the Fc-gamma receptor signaling pathway involved in phagocytosis. From a research standpoint, it is of biological interest due to its association with important macromolecules/ligands like IgG Fc. CD16 is a very popular antibody target, with over 25000 publications in the last decade. CD16a is frequently

used in flow cytometry applications as a phenotypic marker for differentiation of cell types, particularly in the study of immunology. 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 664/20 nm bandpass filter (for example, as in the Luminex Guava easyCyte).