

**XFD647 Anti-human CD16 Antibody *3G8,
XFD647 Same Structure to Alexa Fluor™
647***Catalog number: 10161180, 10161181
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	AF647

Biological Properties

Appearance	Dark blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF647 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	AF647
Excitation Wavelength	650 nm
Emission Wavelength	671 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 XFD647 (ex/em = 650/671 nm). XFD647 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 647 (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).