

XFD647 Anti-human CD16 Antibody *HI16a*

Catalog Number: 10160180, 10160181

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	Lot specific (please consult certificate of analysis for given lot)
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	CD16a (FCRIIIA)
Clone	HI16a
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
Recommended Dilutions	For flow cytometry applications, the suggested concentration is at 5 uL/million cells in 100 uL staining buffer. For the best performance of each application, the optimal concentration of this reagent needs to be carefully determined. <i>*The suggested working dilution is provided as a guide only. It is recommended that the users titrates the product for use in their tests using proper positive and negative controls.</i>

Spectral Properties

Conjugate AF647

Excitation Wavelength 650 nm

Emission Wavelength 671 nm

Applications

The HI16a monoclonal antibody recognizes human CD16a, a 50 - 65 kD transmembrane glycoprotein often located on the surface of neutrophils, natural killer cells and macrophages. CD16 is involved with critical cellular pathways, for instance, the Fc-gamma receptor signaling pathway involved in phagocytosis. From a research standpoint, it is of biological interest due to its association with essential macromolecules/ligands like IgG Fc. CD16 is a very popular antibody target, with over 25000 publications in the last decade. CD16a is essential for innate immunity research, often serving as a phenotypic marker for differentiating cell types in flow cytometric applications. 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 a chemical structure similar to that of Alexa Fluor® 647 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 642 nm laser and 702/85 nm bandpass filter (for example, as in the Luminex Amnis ImageStream).