

## XFD680 Anti-human CD64 Antibody \*10.1\*

Catalog Number: 10640190, 10640191

Unit Size: 100 tests, 500 tests

### Product Details

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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

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Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG1
Immunogen	CD64 (FcR I)
Clone	10.1
Conjugate	AF680

### Biological Properties

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Appearance	Blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF680 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

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Conjugate	AF680
Excitation Wavelength	681 nm
Emission Wavelength	704 nm

## Applications

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The 10.1 monoclonal antibody binds with human CD64, a 72 kD single-pass type I membrane protein typically expressed on the surface of granulocytes, monocytes and dendritic cells. In some organisms, CD64 enhances protein tyrosine kinase activity. Moreover, it is a member of vital cellular pathways, for example, the interferon-gamma-mediated signaling pathway and 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 such as . CD64 is a fairly uncommon antibody target, with a little more than 4000 publications in the last decade. Even still, CD64 is often used in flow cytometry applications as a phenotypic marker for differentiation of cell types, particularly in the study of immunology and innate immunity. 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 a chemical structure similar to that of Alexa Fluor® 680 (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).