

## PE/XFD700 Anti-human CD64 Antibody \*10.1\*

Catalog Number: 106401P0,  
106401P1, 106401P2  
Unit Size: 25 tests, 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	PE/AF700

### Biological Properties

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Preparation	Antibody purified by affinity chromatography and then conjugated with PE/AF700 under optimal conditions
Application	Flow Cytometry (FACS)
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	PE/AF700
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Excitation Wavelength 565 nm

Emission Wavelength 721 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 PE/XFD700 (ex/em = 566/721 nm). XFD700 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 700 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 561 nm laser and 695/40 nm bandpass filter (for example, as in the Agilent Technologies NovoCyt<sup>®</sup> Advanteon).