

## PE/XFD700 Anti-human CD123 Antibody \*12H7\*

Catalog Number: 11231100,  
11231101, 11231102  
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, κ
Immunogen	CD123 (IL-3R $\alpha$ )
Clone	12H7
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 12H7 monoclonal antibody binds to human CD123, a 70 kD single-pass type I membrane protein often located on the surface of macrophages, hematopoietic progenitors and dendritic cells. CD123 acts in vital cellular pathways, for instance, the cytokine-mediated signaling pathway. From a research standpoint, it is of biological interest due to its association with essential macromolecules/ligands like CD131. CD123 is a fairly uncommon antibody target, with a little more than 3900 publications in the last decade. Even still, CD123 is essential for immunology research, typically serving as a phenotypic marker for differentiating cell types in flow cytometric applications. 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 702/85 nm bandpass filter (for example, as in the Luminex Amnis FlowSight).