

## APC/XFD750 Anti-human CD55 Antibody \*HI55a\*

Catalog Number: 105501E0,  
105501E1, 105501E2  
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 IgG2a
Immunogen	CD55 (DAF)
Clone	HI55a
Conjugate	APC/AF750

### Biological Properties

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Preparation	Antibody purified by affinity chromatography and then conjugated with APC/AF750 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	APC/AF750
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Excitation Wavelength 651 nm

Emission Wavelength 785 nm

## Applications

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HI55a is an anti-human monoclonal antibody that targets the CD55 antigen. CD55 (sometimes called Complement decay accelerating factor or DAF (Decay Accelerating Factor)) is a 60 - 70 kD single-pass type I membrane protein that is found on the surface of cells like macrophages, platelets, granulocytes, T cells and NK cells. CD55 is a component of vital cellular pathways, for example, the complement activation, classical pathway and regulation of lipopolysaccharide-mediated signaling pathway. Additionally, in some organisms, it is involved in the positive regulation of CD4-positive, alpha-beta T cell activation, upregulates CD4-positive, alpha-beta T cell proliferation and acts to positively regulate cytosolic calcium ion concentration. From a research standpoint, it is of biological interest due to its association with important macromolecules/ligands like SCR, CD97 and Echoviruses. CD55 is a fairly uncommon antibody target, with a little more than 3000 publications in the last decade. Even still, CD55 is typically used in flow cytometry applications as a phenotypic marker for differentiation of cell types, particularly in the study of cell biology, neuroinflammation and immunology. This antibody was purified through affinity chromatography and conjugated to APC/XFD750 (ex/em = 756/785 nm). XFD750 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 750 (Alexa Fluor® is the trademark of Thermo Fisher).