PE/XFD610 Anti-human CD55 Antibody *HI55a*

Catalog Number: 105501O0, 105501O1, 105501O2
Unit Size: 25 tests, 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 IgG2a
Immunogen	CD55 (DAF)
Clone	HI55a
Conjugate	PE/AF610

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with PE/AF610 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. **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.*

Spectral Properties

Conjugate	PE/AF610

Excitation Wavelength	565 nm
Emission Wavelength	627 nm

Applications

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 PE/XFD610 (ex/em = 567/627 nm). XFD610 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 610 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 561 nm laser and 613/18 nm bandpass filter (for example, as in the BD FACSMelody™).