iFluor™ 350 Anti-human CD55 Antibody *HI55a*

Catalog number: 10550010, 10550011
Unit size: 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	0.1 mg/mL
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	iFluor™ 350

Biological Properties

Appearance	Off-white liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with iFluor™ 350 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	iFluor™ 350
Excitation Wavelength	345 nm
Emission Wavelength	450 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 iFluor™ 350 (ex/em = 345/450 nm). It is compatible with the 355 nm laser and 450/50 nm bandpass filter (for example, as in the BD LSRFortessa™ Cell Analyzer).