

**iFluor™ 647 Anti-human CD55 Antibody**  
**\*HI55a\***Catalog number: 105500F0, 105500F1  
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™ 647 |

**Biological Properties**

|             |                                                                                                            |
|-------------|------------------------------------------------------------------------------------------------------------|
| Appearance  | Blue liquid                                                                                                |
| Preparation | Antibody purified by affinity chromatography and then conjugated with iFluor™ 647 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging                                                                |

**Spectral Properties**

|                       |             |
|-----------------------|-------------|
| Conjugate             | iFluor™ 647 |
| Excitation Wavelength | 656 nm      |
| Emission Wavelength   | 670 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™ 647 (ex/em = 656/670 nm). It is compatible with the 638 nm laser and 660/10 nm bandpass filter (for example, as in the Beckman Coulter DxFLEx).