

**iFluor™ 405 Anti-human CD16 Antibody**  
**\*HI16a\***Catalog number: 10160020, 10160021  
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 IgG1      |
| Immunogen          | CD16a (FCRIIIA) |
| Clone              | HI16a           |
| Conjugate          | iFluor™ 405     |

**Biological Properties**

|             |                                                                                                            |
|-------------|------------------------------------------------------------------------------------------------------------|
| Appearance  | Light yellow liquid                                                                                        |
| Preparation | Antibody purified by affinity chromatography and then conjugated with iFluor™ 405 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging                                                                |

**Spectral Properties**

|                       |             |
|-----------------------|-------------|
| Conjugate             | iFluor™ 405 |
| Excitation Wavelength | 403 nm      |
| Emission Wavelength   | 427 nm      |

**Applications**

The HI16a monoclonal antibody recognizes human CD16a, a 50 - 65 kD transmembrane glycoprotein often located on the surface of neutrophils, natural killer cells and macrophages. CD16 is involved with critical cellular pathways, for instance, the Fc-gamma receptor signaling pathway involved in phagocytosis. From a research standpoint, it is of biological interest due to its association with essential

macromolecules/ligands like IgG Fc. CD16 is a very popular antibody target, with over 25000 publications in the last decade. CD16a is essential for innate immunity research, often serving as a phenotypic marker for differentiating cell types in flow cytometric applications. This antibody was purified through affinity chromatography and conjugated to iFluor™ 405 (ex/em = 403/427 nm). It is compatible with the 405 nm laser and 457/45 nm bandpass filter (for example, as in the Luminex Amnis FlowSight).