

**XFD647 Anti-human CD99 Antibody \*HI156\***

Catalog Number: 10990180, 10990181

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      | 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          | CD99 (MIC2, E2 antigen, HBA71, MSK5X) |
| Clone              | HI156                                 |
| Conjugate          | AF647                                 |

**Biological Properties**

---

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Appearance            | Dark blue liquid                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Preparation           | Antibody purified by affinity chromatography and then conjugated with AF647 under optimal conditions                                                                                                                                                                                                                                                                                                                                            |
| Application           | Flow Cytometry (FACS), Fluorescence Imaging                                                                                                                                                                                                                                                                                                                                                                                                     |
| 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.<br><br><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**

---

Conjugate                    AF647

Excitation Wavelength   650 nm

Emission Wavelength    671 nm

## Applications

---

The HI156 monoclonal antibody reacts with human CD99, a glycoprotein frequently found on the surface of endothelial cells, epithelial cells, thymocytes, natural killer cells and eosinophils. In certain organisms, CD99 positively regulates neutrophil extravasation, and is associated with a variety of biologically interesting macromolecules/ligands, for instance, . CD99 is a fairly uncommon antibody target, with a little more than 3000 publications in the last decade. Even still, CD99 has been widely used in immunology research, typically serving as a phenotypic marker for differentiating cell types in flow cytometric applications. This antibody was purified through affinity chromatography and conjugated to XFD647 (ex/em = 650/671 nm). XFD647 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 647 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 642 nm laser and 702/87 nm bandpass filter (for example, as in the Luminex Amnis CellStream).