

**mFluor™ Violet 450 Anti-human CD123  
Antibody \*12H7\***Catalog number: 112310Z0, 112310Z1  
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, $\kappa$    |
| Immunogen          | CD123 (IL-3R $\alpha$ ) |
| Clone              | 12H7                    |
| Conjugate          | mFluor™ Violet 450      |

**Biological Properties**

|             |                                                                                                                   |
|-------------|-------------------------------------------------------------------------------------------------------------------|
| Appearance  | Light yellow liquid                                                                                               |
| Preparation | Antibody purified by affinity chromatography and then conjugated with mFluor™ Violet 450 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging                                                                       |

**Spectral Properties**

|                       |                    |
|-----------------------|--------------------|
| Conjugate             | mFluor™ Violet 450 |
| Excitation Wavelength | 406 nm             |
| Emission Wavelength   | 445 nm             |

**Applications**

The 12H7 monoclonal antibody binds to human CD123, a 70 kD single-pass type I membrane protein often located on the surface of macrophages, hematopoietic progenitors and dendritic cells. CD123 acts in vital cellular pathways, for instance, the cytokine-mediated signaling pathway. From a research standpoint, it is of biological interest due to its association with essential macromolecules/ligands like CD131. CD123

is a fairly uncommon antibody target, with a little more than 3900 publications in the last decade. Even still, CD123 is essential for 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 mFluor™ Violet 450 (ex/em = 406/445 nm). It is compatible with the 405 nm laser and 450/50 nm bandpass filter (for example, as in the BD FACSCanto™).