

**mFluor™ UV375 Anti-human CD47 Antibody**  
**\*HI172\***Catalog number: 104710X0, 104710X1  
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          | CD47 (gp42, IAP, neurophilin, MER6, Integrin associated protein) |
| Clone              | HI172                                                            |
| Conjugate          | mFluor™ UV375                                                    |

**Biological Properties**

|             |                                                                                                              |
|-------------|--------------------------------------------------------------------------------------------------------------|
| Appearance  | Yellow liquid                                                                                                |
| Preparation | Antibody purified by affinity chromatography and then conjugated with mFluor™ UV375 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging                                                                  |

**Spectral Properties**

|                       |               |
|-----------------------|---------------|
| Conjugate             | mFluor™ UV375 |
| Excitation Wavelength | 351 nm        |
| Emission Wavelength   | 387 nm        |

**Applications**

HI172 is an anti-human monoclonal antibody that is specific for the CD47 antigen. CD47 (sometimes called Integrin associated protein) is a 42 - 52 kD multi-pass membrane protein that is found on the surface of cells such as granulocytes, platelets, endothelial cells and B cells. CD47 acts in critical cellular pathways, in particular, the negative regulation of Fc-gamma receptor signaling pathway involved in phagocytosis and integrin-

mediated signaling pathway. In addition, in certain organisms, it downregulates Fc-gamma receptor signaling pathway involved in phagocytosis, upregulates T cell activation and acts to positively regulate inflammatory response. From a research standpoint, it is of biological interest due to its association with key macromolecules/ligands like SIRP, Thrombospondin and CD61. CD47 is a fairly uncommon antibody target, with a little more than 5000 publications in the last decade. Even still, CD47 is often used in flow cytometry applications as a phenotypic marker for differentiation of cell types, particularly in the study of immunology. This antibody was purified through affinity chromatography and conjugated to mFluor™ UV375 (ex/em = 351/387 nm). It is compatible with the 355 nm laser and 379/28 nm bandpass filter (for example, as in the BD FACSymphony™ A5).