

**PE/iFluor™ 594 Anti-human CD47 Antibody**  
**\*HIRH47\***Catalog number: 104701Y0, 104701Y1, 104701Y2  
Unit size: 25 tests, 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              | HIRH47                                                           |
| Conjugate          | PE/iFluor™ 594                                                   |

**Biological Properties**

|             |                                                                                                               |
|-------------|---------------------------------------------------------------------------------------------------------------|
| Preparation | Antibody purified by affinity chromatography and then conjugated with PE/iFluor™ 594 under optimal conditions |
| Application | Flow Cytometry (FACS)                                                                                         |

**Spectral Properties**

|                       |                |
|-----------------------|----------------|
| Conjugate             | PE/iFluor™ 594 |
| Excitation Wavelength | 566 nm         |
| Emission Wavelength   | 606 nm         |

**Applications**

HIRH47 is an anti-human monoclonal antibody that targets the CD47 antigen. CD47 (sometimes referred to as MER6, Integrin associated protein or Rh-associated protein) is a 42 - 52 kD multi-pass membrane protein that is found on the surface of cells like T cells. In some organisms, CD47 upregulates cell population proliferation, acts to positively regulate phagocytosis and is involved in the positive regulation of stress fiber assembly. In addition, it is a component of key cellular pathways, namely, the integrin-mediated signaling pathway and negative regulation of Fc-gamma receptor signaling pathway involved in phagocytosis. From a research standpoint, it is of biological interest due to its association with

vital 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 PE/iFluor™ 594 (ex/em = 566/606 nm). It is compatible with the 561 nm laser and 613/18 nm bandpass filter (for example, as in the BD FACSMelody™).