

**iFluor™ 610 Anti-mouse/human/rat CD47  
Antibody \*MIAP410\***Catalog number: 104730D0, 104730D1  
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 | Mouse, human, rat                                                |
| Class              | Primary                                                          |
| Clonality          | Monoclonal                                                       |
| Host               | Mouse                                                            |
| Isotype            | Mouse igg1, κ                                                    |
| Immunogen          | CD47 (gp42, IAP, neurophilin, MER6, Integrin associated protein) |
| Clone              | MIAP410                                                          |
| Conjugate          | iFluor™ 610                                                      |

**Biological Properties**

|             |                                                                                                            |
|-------------|------------------------------------------------------------------------------------------------------------|
| Appearance  | Blue liquid                                                                                                |
| Preparation | Antibody purified by affinity chromatography and then conjugated with iFluor™ 610 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging                                                                |

**Spectral Properties**

|                       |             |
|-----------------------|-------------|
| Conjugate             | iFluor™ 610 |
| Excitation Wavelength | 610 nm      |
| Emission Wavelength   | 628 nm      |

**Applications**

The MIAP410 monoclonal antibody binds with mouse/human/rat CD47, a 42 - 52 kD transmembrane protein frequently located on the surface of b cells, thymocytes and epithelial cells. In many organisms, CD47 acts to positively regulate phagocytosis, is a promoter of cell population proliferation and enhances T cell activation. Also, it is involved with vital cellular pathways, for instance, the negative regulation of Fc-gamma

receptor signaling pathway involved in phagocytosis and integrin-mediated signaling pathway. From a research standpoint, it is of biological interest due to its association with critical macromolecules/ligands like Thrombospondin, SIRP and CD61. CD47 is a fairly uncommon antibody target, with a little more than 5000 publications in the last decade. Even still, CD47 has a variety of applications in immunology 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™ 610 (ex/em = 610/628 nm). It is compatible with the 592 nm laser and 610/30 nm bandpass filter (for example, as in the Luminex Amnis ImageStream).