

**iFluor™ 405 Anti-human CD47 Antibody**  
**\*B6.H12\***Catalog number: 10472020, 10472021  
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, κ                                                    |
| Immunogen          | CD47 (gp42, IAP, neurophilin, MER6, Integrin associated protein) |
| Clone              | B6.H12                                                           |
| Conjugate          | iFluor™ 405                                                      |

**Biological Properties**

|             |                                                                                                            |
|-------------|------------------------------------------------------------------------------------------------------------|
| Appearance  | Light yellow liquid                                                                                        |
| Preparation | Antibody purified by affinity chromatography and then conjugated with iFluor™ 405 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging                                                                |

**Spectral Properties**

|                       |             |
|-----------------------|-------------|
| Conjugate             | iFluor™ 405 |
| Excitation Wavelength | 403 nm      |
| Emission Wavelength   | 427 nm      |

**Applications**

B6.H12 is an anti-human monoclonal antibody that is specific for the CD47 antigen. CD47 (sometimes called MER6, Integrin associated protein or integrin-associated protein) is a 42 - 52 kD multi-pass membrane protein that is located on the surface of cells like T cells, erythrocytes, epithelial cells and endothelial cells. CD47 acts in essential cellular pathways, for instance, the negative regulation of Fc-gamma receptor

signaling pathway involved in phagocytosis and integrin-mediated signaling pathway. Also, in some organisms, it is involved in the positive regulation of stress fiber assembly, is a promoter of T cell activation and positively regulates phagocytosis. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands like CD61. CD47 is a fairly uncommon antibody target, with a little more than 5000 publications in the last decade. Even still, CD47 is frequently 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 iFluor™ 405 (ex/em = 403/427 nm). It is compatible with the 405 nm laser and 450/50 nm bandpass filter (for example, as in the BD FACSCanto™ II).