

**PE/XFD700 Anti-human CD47 Antibody**  
**\*B6.H12, XFD700 Same Structure to Alexa**  
**Fluor™ 700\***

Catalog number: 104721Q0, 104721Q1, 104721Q2  
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, κ                                                    |
| Immunogen          | CD47 (gp42, IAP, neurophilin, MER6, Integrin associated protein) |
| Clone              | B6.H12                                                           |
| Conjugate          | PE/AF700                                                         |

### Biological Properties

|             |                                                                                                         |
|-------------|---------------------------------------------------------------------------------------------------------|
| Preparation | Antibody purified by affinity chromatography and then conjugated with PE/AF700 under optimal conditions |
| Application | Flow Cytometry (FACS)                                                                                   |

### Spectral Properties

|                       |          |
|-----------------------|----------|
| Conjugate             | PE/AF700 |
| Excitation Wavelength | 566 nm   |
| Emission Wavelength   | 721 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 PE/XFD700 (ex/em = 566/721 nm). XFD700 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 700 (Alexa Fluor® is the trademark of ThermoFisher). It is compatible with the 561 nm laser and 710/50 nm bandpass filter (for example, as in the BD FACSAria™ III).