

**PE/iFluor™ 594 Anti-human CD19 Antibody**  
**\*4G7\***Catalog number: 101931Y0, 101931Y1, 101931Y2  
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          | CD19 (B4)      |
| Clone              | 4G7            |
| 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**

The 4G7 monoclonal antibody binds with human CD19, a 95 kD transmembrane protein commonly expressed on the surface of B cells and lymphocytes. CD19 plays a role in essential cellular pathways, for example, the antigen receptor-mediated signaling pathway and B cell receptor signaling pathway. Moreover, in some organisms, it acts to positively regulate phosphatidylinositol 3-kinase activity, is an enhancer of protein kinase B signaling and is involved in the positive regulation of release of sequestered calcium ion into cytosol. From a research standpoint, it is of biological interest due to its association with important macromolecules/ligands such as Fyn and PI3-kinase. CD19 is a very popular antibody

target, with over 30000 publications in the last decade. CD19 is essential for immunology research, commonly serving as a phenotypic marker for differentiating cell types in flow cytometric applications. 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 610/20 nm bandpass filter (for example, as in the BD FACSAria™ Fusion).