

**iFluor™ 647 Anti-mouse CD19 Antibody**  
**\*1D3\***Catalog number: 101940F0, 101940F1  
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               |
| Class              | Primary             |
| Clonality          | Monoclonal          |
| Host               | Rat                 |
| Isotype            | Rat IgG2a, $\kappa$ |
| Immunogen          | CD19 (B4)           |
| Clone              | 1D3                 |
| Conjugate          | iFluor™ 647         |

**Biological Properties**

|             |                                                                                                            |
|-------------|------------------------------------------------------------------------------------------------------------|
| Appearance  | Blue liquid                                                                                                |
| Preparation | Antibody purified by affinity chromatography and then conjugated with iFluor™ 647 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging                                                                |

**Spectral Properties**

|                       |             |
|-----------------------|-------------|
| Conjugate             | iFluor™ 647 |
| Excitation Wavelength | 656 nm      |
| Emission Wavelength   | 670 nm      |

**Applications**

1D3 is an anti-mouse monoclonal antibody that is specific for the CD19 antigen. CD19 (sometimes referred to as B4) is a 95 kD transmembrane glycoprotein that is expressed on the surface of cells like B cells and stem cells. CD19 plays a role in essential cellular pathways, namely, the antigen receptor-mediated signaling pathway and B cell receptor signaling pathway. In addition, in some organisms, it is an enhancer of release

of sequestered calcium ion into cytosol, is a promoter of protein kinase B signaling and is a positive regulator of phosphatidylinositol 3-kinase activity. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands like CD225, CD81, PI3-kinase and fyn. CD19 is a very popular antibody target, with over 36000 publications in the last decade. CD19 has been widely used in costimulatory molecules and 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 iFluor™ 647 (ex/em = 656/670 nm). It is compatible with the 642 nm laser and 664/20 nm bandpass filter (for example, as in the Luminex Guava easyCyte).