# mFluor™ Red 780 Anti-mouse CD19 Antibody *1D3*

Catalog number: 101940W0, 101940W1
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, κ |
| Immunogen | CD19 (B4) |
| Clone | 1D3 |
| Conjugate | mFluor™ Red 780 |

## Biological Properties

| | |
|---|---|
| Appearance | Dark blue liquid |
| Preparation | Antibody purified by affinity chromatography and then conjugated with mFluor™ Red 780 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging |

## Spectral Properties

| | |
|---|---|
| Conjugate | mFluor™ Red 780 |
| Excitation Wavelength | 629 nm |
| Emission Wavelength | 767 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 mFluor™ Red 780 (ex/em = 629/767 nm). It is compatible with the 633 nm laser and 780/60 nm bandpass filter (for example, as in the BD FACSCelesta™).