

## PacOrange Anti-mouse CD19 Antibody \*1D3\*

Catalog number: 101941J0, 101941J1  
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	PacOrange

### Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with PacOrange under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

### Spectral Properties

Conjugate	PacOrange
Excitation Wavelength	400 nm
Emission Wavelength	551 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 PacOrange (ex/em = 400/551 nm). It is compatible with the 405 nm laser and 525/50 nm bandpass filter (for example, as in the BD FACSCanto™).