

**iFluor™ 488 Anti-mouse CD19 Antibody  
\*1D3\***Catalog number: 10194050, 10194051  
Unit size: 100 tests, 500 tests**Product Details**

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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**

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Species Reactivity	Mouse
Class	Primary
Clonality	Monoclonal
Host	Rat
Isotype	Rat IgG2a, $\kappa$
Immunogen	CD19 (B4)
Clone	1D3
Conjugate	iFluor™ 488

**Biological Properties**

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Appearance	Orange-red liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with iFluor™ 488 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

**Spectral Properties**

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Conjugate	iFluor™ 488
Excitation Wavelength	491 nm
Emission Wavelength	516 nm

**Applications**

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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™ 488 (ex/em = 491/516 nm). It is compatible with the 488 nm laser and 525/50 nm bandpass filter (for example, as in the Miltenyi Biotec MACSQuant X).