

**iFluor™ 488 Anti-human CD3 Antibody
*OKT-3***Catalog number: 10034050, 10034051
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 | Human |
| Class | Primary |
| Clonality | Monoclonal |
| Host | Mouse |
| Isotype | Mouse igg2a, κ |
| Immunogen | CD3e (T3E) |
| Clone | OKT-3 |
| 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

OKT-3 is an anti-human monoclonal antibody that targets the CD3e antigen. CD3e (alternatively called T cell antigen receptor complex or TCR) is a 20 kD member of the Ig superfamily that is located on the surface of cells like T cells. CD3 is a member of important cellular pathways, in particular, the cell surface receptor signaling pathway, T cell receptor signaling pathway and negative regulation of smoothened signaling

pathway. Furthermore, in certain organisms, it positively regulates calcium-mediated signaling, upregulates peptidyl-tyrosine phosphorylation and enhances cell-matrix adhesion. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands such as TCR. CD3 is a very popular antibody target, with over 80000 publications in the last decade. CD3e is vital to immunology research, typically 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 530/30 nm bandpass filter (for example, as in the BD FACSCanto™ II).