

iFluor™ 800 Anti-human CD3 Antibody
HIT3aCatalog number: 100300N0, 100300N1
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 |
| Immunogen | CD3e (T3E) |
| Clone | HIT3a |
| Conjugate | iFluor™ 800 |

Biological Properties

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| Appearance | Green liquid |
| Preparation | Antibody purified by affinity chromatography and then conjugated with iFluor™ 800 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging |

Spectral Properties

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| Conjugate | iFluor™ 800 |
| Excitation Wavelength | 801 nm |
| Emission Wavelength | 820 nm |

Applications

HIT3a is an anti-human monoclonal antibody that recognizes the CD3e antigen. CD3e (sometimes referred to as T cell antigen receptor complex or T3E) is a 20 kD member of the Ig superfamily that is found on the surface of cells like T cells. CD3 acts in essential cellular pathways, namely, the G protein-coupled receptor signaling pathway, apoptotic signaling pathway and T cell receptor signaling pathway. In addition, in certain

organisms, it positively regulates T cell anergy, acts to positively regulate cell-matrix adhesion and is involved in the positive regulation of calcium-mediated signaling. From a research standpoint, it is of biological interest due to its association with essential macromolecules/ligands such as TCR. CD3 is a very popular antibody target, with over 80000 publications in the last decade. CD3e is typically used in flow cytometry applications as a phenotypic marker for differentiation of cell types, especially in the study of immunology. This antibody was purified through affinity chromatography and conjugated to iFluor™ 800 (ex/em = 801/820 nm).