

**iFluor™ 680 Anti-human CD3 Antibody
*UCHT1***Catalog number: 10032010, 10032011
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 |
| Immunogen | CD3e (T3E) |
| Clone | UCHT1 |
| Conjugate | iFluor™ 680 |

Biological Properties

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| Appearance | Blue liquid |
| Preparation | Antibody purified by affinity chromatography and then conjugated with iFluor™ 680 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging |

Spectral Properties

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|-----------------------|-------------|
| Conjugate | iFluor™ 680 |
| Excitation Wavelength | 684 nm |
| Emission Wavelength | 701 nm |

Applications

The UCHT1 monoclonal antibody binds to human CD3e, a 20 kD member of the Ig superfamily commonly found on the surface of tregs, thymocytes, nkt cells and thymocytes (differentiation dependent)s. In many organisms, CD3 enhances interleukin-4 production, is an inhibitor of gene expression and negatively regulates smoothed signaling pathway. Also, it plays a role in essential cellular pathways, for instance, the cell surface receptor signaling pathway, T cell receptor signaling pathway and apoptotic signaling pathway. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands like 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, particularly in the study of immunology. This antibody was purified through affinity chromatography and conjugated to iFluor™ 680 (ex/em = 684/701 nm).