

**TRITC Anti-human CD3 Antibody \*HIT3b\***Catalog number: 10031110, 10031111  
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	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG1
Immunogen	CD3e (T3E)
Clone	HIT3b
Conjugate	TRITC

**Biological Properties**

---

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

**Spectral Properties**

---

Conjugate	TRITC
Excitation Wavelength	544 nm
Emission Wavelength	570 nm

**Applications**

---

The HIT3b monoclonal antibody binds to human CD3e, a 20 kD single-pass type I membrane protein commonly located on the surface of NK cells, Tregs, thymocytes (differentiation dependent), thymocytes and T cells. In many organisms, CD3 positively regulates T cell energy, is a promoter of peptidyl-tyrosine phosphorylation and enhances interferon-gamma production. Also, it is a component of vital cellular pathways, namely, the G protein-coupled receptor signaling pathway, cell surface receptor signaling pathway and negative regulation of smoothed signaling pathway. 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 frequently 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 TRITC (ex/em = 544/570 nm). It is compatible with the 532 nm laser and 575/25 nm bandpass filter (for example, as in the Luminex Guava easyCyte).