FITC Anti-human CD3 Antibody *HIT3b*

Catalog number: 100311H0, 100311H1
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	FITC

Biological Properties

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

Spectral Properties

Conjugate	FITC
Excitation Wavelength	491 nm
Emission Wavelength	516 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 nkt cells, tregs, thymocytes (differentiation dependent)s, thymocytes and t cells. In many organisms, CD3 positively regulates T cell anergy, 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 smoothened 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 FITC (ex/em = 491/516 nm). It is compatible with the 488 nm laser and 530/40 nm bandpass filter (for example, as in the BD FACSJazz™).