iFluor™ 430 Anti-human CD3 Antibody *HIT3b*

Catalog number: 10031030, 10031031
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	iFluor™ 430

Biological Properties

Appearance	Yellow liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with iFluor™ 430 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	iFluor™ 430
Excitation Wavelength	433 nm
Emission Wavelength	498 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 iFluor™ 430 (ex/em = 433/498 nm). It is compatible with the 445 nm laser and 510/80 nm bandpass filter (for example, as in the BD FACSAria™ III).