

APC/XFD750 Anti-human CD3 Antibody *HIT3b*

Catalog Number: 100311E0,
100311E1, 100311E2
Unit Size: 25 tests, 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	Lot specific (please consult certificate of analysis for given lot)
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	APC/AF750

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with APC/AF750 under optimal conditions
Application	Flow Cytometry (FACS)
Recommended Dilutions	For flow cytometry applications, the suggested concentration is at 5 uL/million cells in 100 uL staining buffer. For the best performance of each application, the optimal concentration of this reagent needs to be carefully determined.
	<i>*The suggested working dilution is provided as a guide only. It is recommended that the users titrates the product for use in their tests using proper positive and negative controls.</i>

Spectral Properties

Conjugate	APC/AF750
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Excitation Wavelength 651 nm

Emission Wavelength 785 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), 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 smooth muscle 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 80,000 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 APC/AF750 (ex/em = 756/785 nm). AF750 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 750 (Alexa Fluor® is the trademark of Thermo Fisher).