iFluor™ 647 Anti-human CD3 Antibody *HIT3a*

Catalog number: 100300F0, 100300F1
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 IgG2a
Immunogen	CD3e (T3E)
Clone	HIT3a
Conjugate	iFluor™ 647

Biological Properties

Appearance	Blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with iFluor™ 647 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	iFluor™ 647
Excitation Wavelength	656 nm
Emission Wavelength	670 nm

Applications

HIT3a is an anti-human monoclonal antibody that recognizes the CD3e antigen. CD3e (sometimes referred to as T cell antigen receptor complex or T3E) is a 20 kD member of the Ig superfamily that is found on the surface of cells like T cells. CD3 acts in essential cellular pathways, namely, the G protein-coupled receptor signaling pathway, apoptotic signaling pathway and T cell receptor signaling pathway. In addition, in certain

organisms, it positively regulates T cell anergy, acts to positively regulate cell-matrix adhesion and is involved in the positive regulation of calcium-mediated signaling. From a research standpoint, it is of biological interest due to its association with essential macromolecules/ligands such as 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, especially in the study of immunology. This antibody was purified through affinity chromatography and conjugated to iFluor™ 647 (ex/em = 656/670 nm). It is compatible with the 642 nm laser and 702/85 nm bandpass filter (for example, as in the Luminex Amnis FlowSight).