

PerCP Anti-human CD3 Antibody *HIT3a*

Catalog number: 100301T0, 100301T1, 100301T2

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	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	PerCP

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with PerCP under optimal conditions
Application	Flow Cytometry (FACS)

Spectral Properties

Conjugate	PerCP
Excitation Wavelength	477 nm
Emission Wavelength	678 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 energy, 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 PerCP (ex/em = 477/678 nm). It is compatible with the 488 nm laser and 693/37 nm bandpass filter (for example, as in the Miltenyi Biotec MACSQuant Analyzer 10).