FITC Anti-human CD4 Antibody *RPA-T4*

Catalog number: 100411H0, 100411H1
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	CD4 (Leu-3, T4)
Clone	RPA-T4
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

RPA-T4 is an anti-human monoclonal antibody that targets the CD4 antigen. CD4 (sometimes called T4 or Leu3a) is a 55 kD transmembrane glycoprotein that is expressed on the surface of cells such as granulocytes, T cells and macrophages. CD4 acts in vital cellular pathways, for instance, the T cell receptor signaling pathway, interleukin-15-mediated signaling pathway and enzyme linked receptor protein signaling pathway. Furthermore, in many organisms, it promotes interleukin-2 biosynthetic process, upregulates peptidyl-tyrosine phosphorylation and acts to positively regulate I-kappaB kinase/NF-kappaB signaling. CD4 has been associated with key biological processes such as membrane organization, specifically fusion of virus membrane with host plasma membrane, and is associated with a variety of biologically interesting

macromolecules/ligands, namely, gp120 and Lck. CD4 is a very popular antibody target, with over 180000 publications in the last decade. CD4 is commonly 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 527/32 nm bandpass filter (for example, as in the BD FACSVerse™).