

Catalog number: 100411A0, 100411A1 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
onality Monoclonal	

Host	Mouse
Isotype	Mouse IgG1
Immunogen	CD4 (Leu-3, T4)
Clone	RPA-T4
Conjugate	AF700

Biological Properties

Appearance	Dark blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF700 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging
Spectral Properties	

Conjugate	AF700
Excitation Wavelength	696 nm
Emission Wavelength	719 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 AF700 (ex/em = 696/719 nm).