

iFluor™ 405 Anti-human CD4 Antibody
OKT-4Catalog number: 10043020, 10043021
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 igg2b, κ
Immunogen	CD4 (Leu-3, T4)
Clone	OKT-4
Conjugate	iFluor™ 405

Biological Properties

Appearance	Light yellow liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with iFluor™ 405 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	iFluor™ 405
Excitation Wavelength	403 nm
Emission Wavelength	427 nm

Applications

OKT-4 is an anti-human monoclonal antibody that targets the CD4 antigen. CD4 (also known as T4) is a 55 kD member of the Ig superfamily that is located on the surface of cells such as macrophages. In certain organisms, CD4 positively regulates kinase activity, promotes I-kappaB kinase/NF-kappaB signaling and upregulates transcription, DNA-templated. Additionally, it has been thought to be involved with essential

biological processes such as immune response, especially adaptive immune response. CD4 is a member of critical cellular pathways, for instance, the cytokine-mediated signaling pathway, enzyme linked receptor protein signaling pathway and interleukin-15-mediated signaling pathway. From a research standpoint, it is of biological interest due to its association with key macromolecules/ligands like Lck and IL-16. CD4 is a very popular antibody target, with over 185000 publications in the last decade. CD4 is frequently 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™ 405 (ex/em = 403/427 nm). It is compatible with the 405 nm laser and 450/50 nm bandpass filter (for example, as in the Miltenyi Biotec MACSQuant X).