

**XFD555 Anti-human CD4 Antibody *OKT-4,
XFD555 Same Structure to Alexa Fluor™
555***Catalog number: 10043160, 10043161
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	AF555

Biological Properties

Appearance	Red liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF555 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	AF555
Excitation Wavelength	553 nm
Emission Wavelength	568 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 XFD555 (ex/em = 553/568 nm). XFD555 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 555 (Alexa Fluor® is the trademark of ThermoFisher). It is compatible with the 561 nm laser and 577/35 nm bandpass filter (for example, as in the Luminex Amnis ImageStream).