

**iFluor™ 710 Anti-human CD3 Antibody
*OKT-3***Catalog number: 100340K0, 100340K1
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 igg2a, κ
Immunogen	CD3e (T3E)
Clone	OKT-3
Conjugate	iFluor™ 710

Biological Properties

Appearance	Blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with iFluor™ 710 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	iFluor™ 710
Excitation Wavelength	717 nm
Emission Wavelength	739 nm

Applications

OKT-3 is an anti-human monoclonal antibody that targets the CD3e antigen. CD3e (alternatively called T cell antigen receptor complex or TCR) is a 20 kD member of the Ig superfamily that is located on the surface of cells like T cells. CD3 is a member of important cellular pathways, in particular, the cell surface receptor signaling pathway, T cell receptor signaling pathway and negative regulation of smoothed signaling

pathway. Furthermore, in certain organisms, it positively regulates calcium-mediated signaling, upregulates peptidyl-tyrosine phosphorylation and enhances cell-matrix adhesion. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands such as TCR. CD3 is a very popular antibody target, with over 80000 publications in the last decade. CD3e is vital to immunology research, typically serving as a phenotypic marker for differentiating cell types in flow cytometric applications. This antibody was purified through affinity chromatography and conjugated to iFluor™ 710 (ex/em = 717/739 nm).