

**PacOrange Anti-human CD3 Antibody  
\*OKT-3\***Catalog number: 100341K0, 100341K1  
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	PacOrange

**Biological Properties**

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

**Spectral Properties**

Conjugate	PacOrange
Excitation Wavelength	400 nm
Emission Wavelength	551 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 PacOrange (ex/em = 400/551 nm). It is compatible with the 405 nm laser and 530/30 nm bandpass filter (for example, as in the BD FACSAria™ II).