

**XFD555 Anti-human CD3 Antibody *SK7,
XFD555 Same Structure to Alexa Fluor™
555***Catalog number: 10033160, 10033161
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
Immunogen	CD3e (T3E)
Clone	SK7
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

The SK7 monoclonal antibody reacts with human CD3e, a 20 kD member of the Ig superfamily often found on the surface of t cells, tregs and nkt cells. In many organisms, CD3 positively regulates interleukin-2 biosynthetic process, enhances cell-matrix adhesion and is a positive regulator of gene expression. Moreover, it plays a role in essential cellular pathways, for example, the T cell receptor signaling pathway, negative regulation of smoothened signaling pathway and apoptotic signaling pathway. From a research standpoint, it is of biological interest due to its

association with vital macromolecules/ligands like TCR. CD3 is a very popular antibody target, with over 80000 publications in the last decade. CD3e is frequently 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 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 585/16 nm bandpass filter (for example, as in the Thermo Fisher Attune NxT).