

**XFD594 Anti-human CD3 Antibody \*SK7,  
XFD594 Same Structure to Alexa Fluor™  
594\***Catalog number: 10033170, 10033171  
Unit size: 100 tests, 500 tests**Product Details**

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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**

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Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Immunogen	CD3e (T3E)
Clone	SK7
Conjugate	AF594

**Biological Properties**

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Appearance	Purple liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF594 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

**Spectral Properties**

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Conjugate	AF594
Excitation Wavelength	590 nm
Emission Wavelength	618 nm

**Applications**

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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 XFD594 (ex/em = 590/618 nm). XFD594 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 594 (Alexa Fluor® is the trademark of ThermoFisher). It is compatible with the 592 nm laser and 610/30 nm bandpass filter (for example, as in the Luminex Amnis ImageStream).