

**XFD594 Anti-human CD3 Antibody *UCHT1,
XFD594 Same Structure to Alexa Fluor™
594***Catalog number: 10032170, 10032171
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	UCHT1
Conjugate	AF594

Biological Properties

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

Conjugate	AF594
Excitation Wavelength	590 nm
Emission Wavelength	618 nm

Applications

The UCHT1 monoclonal antibody binds to human CD3e, a 20 kD member of the Ig superfamily commonly found on the surface of tregs, thymocytes, nkt cells and thymocytes (differentiation dependent)s. In many organisms, CD3 enhances interleukin-4 production, is an inhibitor of gene expression and negatively regulates smoothened signaling pathway. Also, it plays a role in essential cellular pathways, for instance, the cell surface receptor signaling pathway, T cell receptor 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 typically 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).