

**XFD488 Anti-human CD3 Antibody \*UCHT1,  
XFD488 Same Structure to Alexa Fluor™  
488\***Catalog number: 10032150, 10032151  
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	UCHT1
Conjugate	AF488

**Biological Properties**

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Appearance	Red liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF488 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

**Spectral Properties**

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Conjugate	AF488
Excitation Wavelength	499 nm
Emission Wavelength	520 nm

**Applications**

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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 smoothed 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 XFD488 (ex/em = 499/520 nm). XFD488 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 488 (Alexa Fluor® is the trademark of ThermoFisher). It is compatible with the 488 nm laser and 530/30 nm bandpass filter (for example, as in the Agilent Technologies NovoCyte Quanteon).