

**PE/XFD700 Anti-human CD3 Antibody**  
**\*UCHT1, XFD700 Same Structure to Alexa**  
**Fluor™ 700\***

Catalog number: 100321P0, 100321P1, 100321P2  
Unit size: 25 tests, 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	PE/AF700

### Biological Properties

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Preparation	Antibody purified by affinity chromatography and then conjugated with PE/AF700 under optimal conditions
Application	Flow Cytometry (FACS)

### Spectral Properties

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Conjugate	PE/AF700
Excitation Wavelength	566 nm
Emission Wavelength	721 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). 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 PE/XFD700 (ex/em =

566/721 nm). XFD700 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 700 (Alexa Fluor® is the trademark of ThermoFisher). It is compatible with the 561 nm laser and 710/50 nm bandpass filter (for example, as in the BD Special Order LSRFortessa™ Cell Analyzer).