

# PE/Texas Red® Anti-human CD3 Antibody \*UCHT1\*

 ${\sf Catalog\ number:\ 100321S0,\ 100321S1,\ 100321S2}$ 

Unit size: 25 tests, 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 PE/Texas Red®

## **Biological Properties**

Preparation Antibody purified by affinity chromatography and then conjugated with PE/Texas Red® under optimal

conditions

Application Flow Cytometry (FACS)

## **Spectral Properties**

Conjugate PE/Texas Red®

Excitation Wavelength 567 nm

Emission Wavelength 615 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 PE/Texas Red® (ex/em =

567/615 nm). It is compatible with the 561 nm laser and 615/20 nm bandpass filter (for example, as in the Agilent Technologies NovoCyte).	