

## TECHNICAL DATA SHEET

### CyFlow™ CD3 Biotin Anti-Hu; Clone UCHT1

**REF** BG923119

**For Research Use Only.  
Not for use in diagnostic or therapeutic procedures.**

### Specifications

<b>Antigen</b>	CD3
<b>Alternative Names</b>	T3, Leu4
<b>Clone</b>	UCHT1
<b>Clonality</b>	monoclonal
<b>Format</b>	Biotin
<b>Host / Isotype</b>	Mouse / IgG1
<b>Species Reactivity</b>	Human, Non-Human Primates
<b>Negative Species Reactivity</b>	—
<b>Quantity [Concentration]</b>	0.1 mg [ 1 mg/ml ]
<b>Immunogen</b>	Human thymocytes followed by Sezary T cells

### Specificity

The mouse monoclonal antibody UCHT1 recognizes the CD3 antigen of the TCR/CD3 complex on mature human T cells. The UCHT1 antibody reacts with the  $\epsilon$  chain of the CD3 complex. The monoclonal antibodies UCHT1 and SK7 recognize overlapping epitopes.

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## Application

The reagent is designed for indirect immunofluorescence analysis by Flow Cytometry. Working concentrations should be determined by the investigator.

Other usages may be determined from the scientific literature.

## Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH  $\approx$ 7.4, containing 0.1% (w/v) sodium azide.

## Storage and Stability

<b>Storage</b>	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
<b>Stability</b>	Do not use after expiration date stamped on vial label.

## Background Information

CD3 complex is crucial in transducing antigen-recognition signals into the cytoplasm of T cells and in regulating the cell surface expression of the TCR complex. T cell activation through the antigen receptor (TCR) involves the cytoplasmic tails of the CD3 subunits CD3  $\gamma$ , CD3  $\delta$ , CD3  $\epsilon$  and CD3  $\zeta$ . These CD3 subunits are structurally related members of the immunoglobulins super family encoded by closely linked genes on human chromosome 11. The CD3 components have long cytoplasmic tails that associate with cytoplasmic signal transduction molecules. This association is mediated at least in part by a double tyrosine-based motif present in a single copy in the CD3 subunits. CD3 may play a role in TCR-induced growth arrest, cell survival and proliferation. The CD3 antigen is present on 68-82% of normal peripheral blood lymphocytes, 65-85% of thymocytes and Purkinje cells in the cerebellum. It is never expressed on B or NK cells. Decreased percentages of T lymphocytes may be observed in some autoimmune diseases.

## References

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The Safety Data Sheet for this product is available at [www.sysmex-partec.com/services](http://www.sysmex-partec.com/services).

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