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## **Monoclonal Antibody To Human CD3**

### **Marker for Thymocytes and Peripheral T cells**

Monoclonal antibody UCHT-1 recognizes the CD3 antigen on mature human T-cells. The CD3 antigen is a protein complex composed of four distinct chains (CD3 $\gamma$ , CD3 $\delta$  and two CD3 $\epsilon$ ) that associate with the T cell receptor (TCR) and the  $\zeta$ -chain to generate an activation signal in T lymphocytes. The TCR,  $\zeta$ -chain and CD3 molecules together comprise the TCR complex. The CD3 $\gamma$ , CD3 $\delta$  and CD3 $\epsilon$  chains are highly related cell surface proteins of the immunoglobulin superfamily containing a single extracellular immunoglobulin domain.

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<b>Product Number:</b>	T-1363 (Lot 01PO0801)
<b>Clone:</b>	UCHT-1
<b>Host species, isotype:</b>	Mouse IgG1/kappa
<b>Quantity:</b>	100 $\mu$ g
<b>Format:</b>	Affinity purified, lyophilized  Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.2mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 5mg/ml bovine serum albumin (BSA), and 0.09% sodium azide as a preservative.
<b>Stability:</b>	Original vial: 1 year at 4° - 8°C  Stock solution or aliquots thereof: 1 year at -20°C. Avoid repeated thawing and freezing.
<b>Applications:</b>	Tested for immunohistochemistry (IHC); has been described to work in FACS.  <b>Approximate working dilution for IHC:</b> Frozen sections: 0.2 $\mu$ g/ml (1:1000) Paraffin sections: not determined  Optimal dilutions should be determined by the end user. Suggested positive control: Human tonsil.  Please see <b>www.bma.ch</b> for protocols and general information.
<b>Immunogen:</b>	Human thymocytes followed by Sezary T cells.
<b>Antigen, epitope:</b>	The antigen is CD3. The epitope is located on the $\epsilon$ chain.

**Antigen distribution:** **Isolated cells:** The antibody stains approximately 60-90% of human peripheral blood mononuclear cells in flow cytometry.

**Specificity:** **Human:** CD3  
**Other:** not tested.

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### **Selected references**

McMichael, A.J. et al. (eds.), Leukocyte typing III., Oxford University Press, Oxford, (1987)

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Barclay, Brown et al., The Leukocyte Antigen FactsBook, 2nd edition, Harcourt Brace & Company, London, (1997)

Beverly and Callard, Euro. J. Immunol. 11: p329-334 (1981)

J.A. Garson et al. Nature 298: p375-377 (1982)

For *in vitro* research only. Caution: this product contains sodium azide, a poisonous and hazardous substance.