

**PERFORMANCE DATA SHEET**  
2133

**Monoclonal anti-human CD3 $\epsilon$ \***

**mAb name/Clone:** UCHT1

**Isotype:** Mouse IgG1

**Immunogen:** Human thymocytes/Sezary T cells

**CATALOG#:** 144-820 (Preservative-free)

**QUANTITY:** 100  $\mu$ g

**CONCENTRATION:** 1.0 mg/ml

**INFORMATION:** The human CD3/T cell receptor (TcR) complex is made up of at least five CD3 proteins ( $\gamma$ ,  $\delta$ ,  $\epsilon$ ,  $\eta$ ,  $\zeta$ ) in association with either  $\alpha/\beta$  or  $\gamma/\delta$  proteins of the TcR. The TcR recognizes antigens in association with MHC molecules after which protein chains of the CD3 complex mediate activation signals triggered by TcR antigen binding. CD3 is expressed on greater than 95% of circulating human peripheral T cells. Antibody UCHT1 recognizes the 20 kd epsilon chain of the CD3 molecule complex. Antibody UCHT1 will activate T cells expressing CD3 $\epsilon$ .

**References:** P.C. L. Beverly & R.E. Callard, Eur J Immunol (1981) **11**: 329-334. Leukocyte Typing IV (W. Knapp, et al, eds.) Oxford University Press, Oxford, (1989) p. 290-314. A. Salmeron, et al, (1991) J Immunol **147**: 3047-3052. G. Thibault & P. Bardos, (1995) J Immunol **154**: 3814-3820.

**STORAGE CONDITIONS:** Store at 2 - 5°C. Open under aseptic conditions. Freeze/Thawing is not recommended.

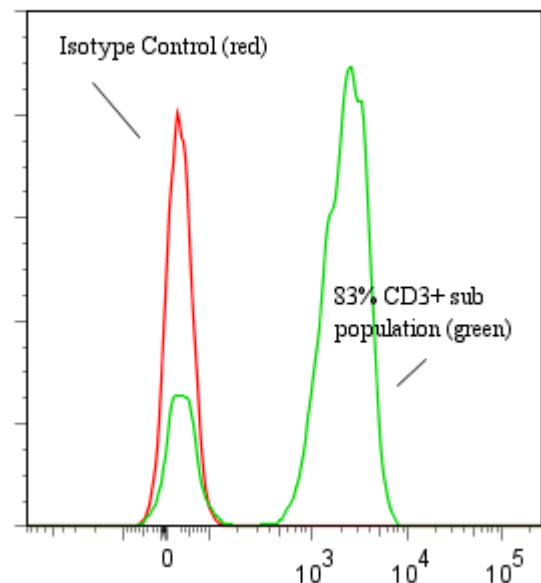
**PRODUCT STABILITY:** Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date: \_\_\_\_\_

**BUFFER:** 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl.

**PRODUCTION:** Antibody was Protein A purified from (low FBS containing) tissue culture supernatant. Purity was >95% Immunoglobulin by SDS-PAGE and contains less than 1% Bovine Immunoglobulin. Product was 0.2  $\mu$ m filtered and vialled under aseptic conditions.

**PERFORMANCE:** Five x 10<sup>5</sup> ficoll prepared human PBMC were washed and incubated 45 minutes on ice with 80  $\mu$ l of anti-CD3 antibody at 5  $\mu$ g/ml. Cells were washed twice and incubated with 2° reagent Goat anti-Mouse IgG/FITC (Catalog #232-011), after which they were washed three times, fixed and analyzed by FACS using a lymphocyte gate. An 83% sub population of cells stained positive for CD3 with a mean shift of 1.99 log<sub>10</sub> fluorescent units when compared to a Mouse IgG1 negative control (Catalog # 278-010) at a similar concentration.

**Binding of anti-CD3 antibody to ficoll prepared human PBMC (lymphocyte gate) + GAM/FITC**



\* **Research Use Only. Not for use in Diagnostic procedures.**