

## PERFORMANCE DATA SHEET

1817

# Monoclonal anti-human CD3/FITC\*

**mAb name/Clone:** UCHT1

**Isotype:** Mouse IgG1

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

**CATALOG#:** 144-040

**QUANTITY:** 120 tests

**VOLUME IN VIAL:** 0.2ml

**WORKING DILUTION:** 1:50 (or use 1.6µl of concentrated stock per  $5 \times 10^5$ -cell test)

**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. Freeze/Thawing is not recommended. Protect from light.

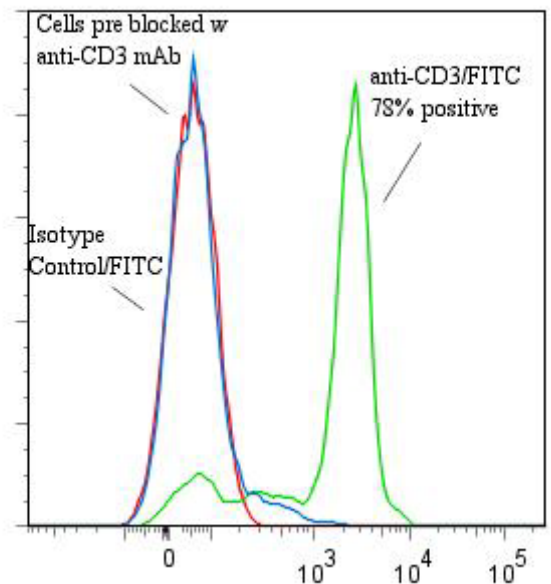
**PRODUCT STABILITY:** Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date: \_\_\_\_\_

**BUFFER:** 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl, 5% Glycerol, 0.2% BSA, 0.04% NaN<sub>3</sub> (as a preservative).

**PRODUCTION:** Protein A purified antibody from tissue culture supernatant was reacted with FITC. Unconjugated FITC was separated from antibody/FITC conjugate by desalting column. The antibody/FITC conjugate is at 0.5 mg/ml with a Fluorescein/IgG molar ratio of 11.6.

**PERFORMANCE:** Five  $\times 10^5$  ficoll prepared peripheral blood mononuclear cells were washed and pre incubated 10 minutes with 20µl of 250 µg/ml human IgG (to block non specific binding), after which they were incubated 45 minutes on ice with 80 µl of anti-CD3/FITC at a 1:50 dilution factor (10µg/ml). Cells were washed three times, fixed and analyzed by FACS. A 78% sub population of the cells stained positive with a mean shift of 1.67 log<sub>10</sub> fluorescent units when compared to a Mouse IgG1/FITC negative control (Catalog #278-040) at a similar concentration. Binding was blocked when cells were pre incubated 10 minutes with 20 ml of 0.5 mg/ml anti-CD3 antibody (Catalog #144-020).

### Binding of anti-CD3/FITC to human PBMC



*\*This Product is intended for Laboratory Research use only.*

Ancell Corporation P.O. Box 87 243 Third Street North Bayport, MN 55003-0087 USA  
Phone: Toll free 800-374-9523 or 651-439-0835 Fax: 651-439-1940