

**PERFORMANCE DATA SHEET**

3022

**Monoclonal anti-human CD3 F(ab')<sub>2</sub>\***

**mAb name/Clone:** UCHT1

**Isotype:** Mouse IgG1

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

**CATALOG#:** 144-520

**QUANTITY:** 100 µg

**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.

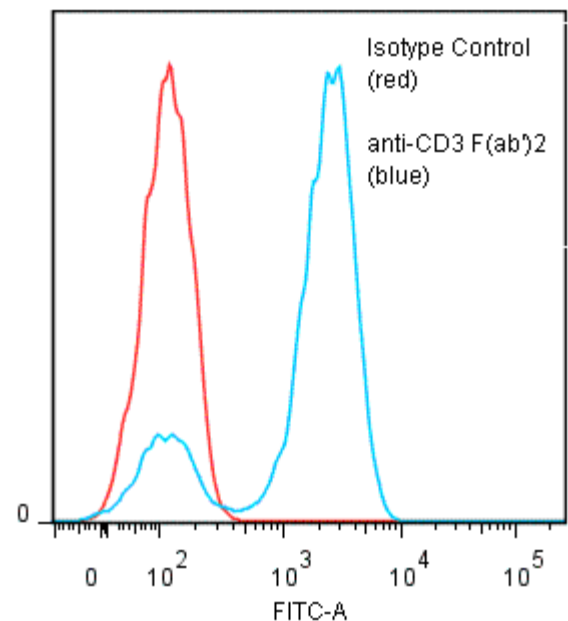
**PRODUCT STABILITY:** Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date: \_\_\_\_\_

**BUFFER:** 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl. Product was sterile filtered and vialled under aseptic conditions. **No preservative added.**

**PRODUCTION:** Antibody was Protein A purified from (low FBS containing) tissue culture supernatant. Immunoglobulin was enzymatically cleaved using Immobilized Ficin. F(ab')<sub>2</sub> was separated from intact antibody and Fc fragments using Protein A and Size exclusion chromatography. Purity was >90% F(ab')<sub>2</sub> by SDS-PAGE.

**PERFORMANCE:** Five x 10<sup>5</sup> ficoll prepared human **peripheral blood mononuclear cells** per tube were washed and pre incubated 5 minutes with 20 µl of 250 µg/ml human IgG (to block nonspecific binding) after which they were incubated 45 minutes on ice with 80µl of anti-CD3 F(ab')<sub>2</sub> at **5 µg/ml**. Cells were washed twice and incubated with 50 µl of 2<sup>o</sup> reagent Goat anti-Mouse IgG/FITC (Catalog #232-011), after which they were washed three times, fixed and analyzed by FACS using a lymphoid gate. A net **81%** sub population of the cells stained positive with a mean shift of **1.32** log<sub>10</sub> fluorescent units when compared to a Mouse IgG1F(ab')<sub>2</sub> negative control (Catalog # 278-520).

**Binding of anti-CD3 F(ab')<sub>2</sub> +GAM/FITC to human PBL**



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