

## PERFORMANCE DATA SHEET

1938

### *Monoclonal anti-human CD8/PE-Cy7\**

*mAb name/Clone:* 14

*Isotype:* Mouse IgG1

*Immunogen:* Human Thymocytes

**CATALOG#:** 154-070

**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:** Human CD8 is a heterodimeric protein consisting of an  $\alpha$  and  $\beta$  chain, each about 33 kd. CD8 is expressed on most thymocytes and on about one third of peripheral blood T cells. CD8 is a co-receptor involved in antigen recognition and binds to the  $\alpha 2$  and  $\alpha 3$  domain of MHC Class I molecules. Antibody 14 recognizes the CD8  $\alpha$  chain of approximately 33 kd.

**References:** Leukocyte Typing II (E.L. Reinherz, et al, eds.) Springer Verlag, New York, (1986). R. Zamoyska, (1994) Immunity **1**: 243-246. Leukocyte Typing V (S.F. Schlossman, et al, eds.) Oxford University Press, Oxford, (1995) p. 353-356. J. Sun, et al, (1995) J Exp Med **182**: 1275-1280

**FLORESCENCE:** PE-Cy7 is excited by 488 laser. Its  $E_{max}$  is 785nm.

**STORAGE CONDITIONS:** Store at 2 - 5°C. Do not freeze! 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, 500 mM Potassium Chloride, 150mM NaCl, 15% Glycerol, 0.2% BSA, 0.04% NaN<sub>3</sub> (as a preservative).

**PRODUCTION:** Protein A purified antibody from tissue culture supernatant was conjugated to Cy7-linked R-Phycoerythrin through a sulfo-ester linkage. Unconjugated antibody was removed using size exclusion chromatography. Antibody conjugate is at 250 µg/ml.

**PERFORMANCE:** Reagent was tested for binding to ficoll prepared human peripheral blood mononuclear cells (PBMC) in FACS. Five  $\times 10^5$  PBMC per tube were washed and pre incubated with 20 µl of 300 µg/ml human IgG (to block non specific binding), after which they were incubated 45 minutes on ice with 80 µl of anti-human CD8/PE-Cy7 at a 1:50 dilution (5 µg/ml). Cells were then washed three times, fixed and analyzed by FACS using a lymphoid gate. A 25.7% sub population of the cells stained positive with a mean shift of 2.5 log<sub>10</sub> fluorescent units when compared to background. Binding was blocked when cells were pre incubated 10 minutes with 20 µl of 0.5 mg/ml anti-human CD8 antibody (Catalog #154-020).

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

