

**PERFORMANCE DATA SHEET**

2134

**Monoclonal anti-human CD8/R-PE\***

**mAb name/Clone:** 14

**Isotype:** Mouse IgG1

**Immunogen:** Human Thymocytes

**CATALOG#:** 154-050

**QUANTITY:** 120 tests

**VOLUME IN VIAL:** 200 µl

**WORKING DILUTION:** 1:50 (or use 1.6µl of concentrated stock per 5 x 10<sup>5</sup>-cell-test)

**INFORMATION:** Human CD8 is a heterodimeric protein consisting of an α and β 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 α2 and α3 domain of MHC Class I molecules. Antibody 14 recognizes the CD8 α 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.

**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, 0.3% BSA, 0.04% NaN<sub>3</sub> (as a preservative).

**PRODUCTION:** Protein A purified antibody from tissue culture supernatant was conjugated to R-Phycoerythrin through a sulf-ester linkage. Unconjugated antibody was removed using size exclusion chromatography. Antibody conjugate is at 0.5 mg/ml with an A<sub>565</sub>/A<sub>280</sub> ratio of 3.18.

**PERFORMANCE:** Five x 10<sup>5</sup> ficoll prepared human peripheral blood leucocytes were washed and pre incubated with 20 ul of 300ug/ml human IgG (to reduce non specific binding) after which they were incubated 45 minutes on ice with 80 µl of anti-CD8/R-PE at a 1:50 dilution (10 µg/ml). Cells were washed three times, fixed and analyzed by FACS. A 27% sub population of the cells stained positive with a mean shift of 2.51 log<sub>10</sub> fluorescent units when compared to a Mouse IgG1/R-PE negative control (Catalog #278-050) at a similar concentration. Binding was blocked when cells were pre incubated 10 minutes with 20 µl of 0.5 mg/ml anti-CD8(14) antibody (Catalog #154-020).

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

R-Phycoerythrin (R-PE) is covered under patents: U.S. 4,520,110; European 76,695 and Canadian 1,179,942.

**Binding of anti-CD8/PE to human PBL**

