

# PERFORMANCE DATA SHEET

1817

## Monoclonal anti-human CD45RO/R-PE \*

**mAb name/Clone:** UCHL1

**Isotype:** Mouse IgG2a

**Immunogen:** Cultured human T-cell line - CA1

**CATALOG#:** 194-050

**QUANTITY:** 120 tests

**VOLUME IN VIAL:** 0.2 ml

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

**INFORMATION:** Human CD45 is expressed on all cells of hematopoietic origin, except erythrocytes. CD45 is a transmembrane tyrosine phosphatase which can exist in at least nine different isoforms resulting from tissue-specific alternative RNA splicing of exons 4-7 of a single gene coding for the various N-terminal peptide segments. The CD45RO isoform contains none of the alternatively spliced exons and is present on most thymocytes, a subpopulation of resting (memory) T cells within both CD4 and CD8 subsets as well as on monocytes and granulocytes. CD45RO plays an essential role in lymphocyte activation. Antibody UCHL1 recognizes the CD45RO isoform of about 180 kd.

**References:** S.H. Smith, et al, (1986) Immunology **58**: 63-70. M. Streulo, et al, (1988) J Immunol **141**: 3910-3914. M. Merckenschlager & P.C.L. Beverly, (1989) Intl Immunol **1**: 450-459. I.S. Trowbridge & M.L. Thomas, (1994) Annu Rev Immunol **12**: 85-116. Leukocyte Typing V (S.F. Schlossman, et al, eds.) Oxford University Press, Oxford, (1995) p. 386-399. D. Leitenberg, et al, (1996) J Exp Med **183**: 249-259.

**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 R-Phycoerythrin through a sulfo-ester linkage. Unconjugated antibody was removed using size exclusion chromatography. Antibody conjugate is at approximately **1.0 mg/ml** with an A<sub>565</sub>/A<sub>280</sub> ratio of 3.53.

**PERFORMANCE:** Five  $\times 10^5$  ficoll prepared human peripheral blood mononuclear cells were washed and incubated 45 minutes on ice with 80 µl of anti-CD45RO/R-PE at a 1:50 dilution (20µg/ml). Cells were washed three times, fixed and analyzed by FACS. A net 53% subpopulation of the cells stained positive with a mean shift of 1.73 log<sub>10</sub> fluorescent units when compared to a Mouse IgG2a/PE negative control (Catalog # 281-050). Binding was blocked when cells were pre incubated 10 minutes with 20 µl of 0.5 mg/ml anti-CD45RO antibody (Catalog #194-020).

*\*Research use only. Not for use in Diagnostic procedures.*

**Binding of anti-CD45RO/PE to human PBMC**

