

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 5×10^5 -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% NaN₃ (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 A₅₆₅/A₂₈₀ 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 log₁₀ fluorescent units when compared to a Mouse IgG2a/PE negative control (Catalog # 281-050) at a similar concentration. Binding was blocked when cells were pre incubated 10 minutes with 20 µl of 0.5 mg/ml anti-CD45RO antibody (Catalog #194-020).

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

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

Binding of anti-CD45RO/PE to human PBMC

