

PERFORMANCE DATA SHEET

1817

Monoclonal anti-human CD45RO/FITC*

mAb name/Clone: UCHL1

Isotype: Mouse IgG2a

Immunogen: Cultured human T cell line CA-1

CATALOG#: 194-040

QUANTITY: 120 tests

VOLUME IN VIAL: 0.2 ml

WORKING DILUTION: 1:50 (or use 1.6µl of concentrated stock per 5 x 10⁵-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. Freeze/Thawing is not recommended. 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, 100 mM Potassium Chloride, 150mM NaCl, 5% Glycerol, 0.2% BSA, 0.04% NaN₃ (as a preservative).

PRODUCTION: Antibody from (low FBS containing) tissue culture supernatant was Protein A purified to 95% Immunoglobulin by SDS-PAGE, and reacted with FITC. Unconjugated FITC was removed from conjugate using a desalting column. Antibody conjugate is at approximately 0.5 mg/ml with a Fluorescein/IgG molar ratio of 3.6.

PERFORMANCE: Five x 10⁵ ficoll prepared human peripheral blood mononuclear cells were washed and pre incubated 5 minutes with 20µl of 250 µg/ml human IgG (to block non specific binding), after which they were incubated 45 minutes on ice with 80 µl of anti-CD45RO/FITC at a 1:50 dilution (10 µg/ml). Cells were washed three times, fixed and analyzed by FACS. A net 28% sub population of the cells stained positive with a mean shift of 1.05 log₁₀ fluorescent units when compared to a Mouse IgG2a/FITC negative control (Catalog # 281-040) 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.*

Binding of anti-CD45RO/FITC to human cell types

