

**PERFORMANCE DATA SHEET**

1818

**Monoclonal anti-human CD45RA/Biotin\***

**mAb name/Clone:** 158.4D3

**Isotype:** Mouse IgG2ak

**Immunogen:** Stimulated human leukocytes

**CATALOG#:** 394-030

**QUANTITY:** 100 µg

**CONCENTRATION:** 1.0 mg/ml

**INFORMATION:** Human CD45RA is expressed on all cells of hematopoietic origin, except erythrocytes. CD45RA is a transmembrane tyrosine phosphate 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 CD45RA isoform predominates on naive/resting T cells and medullary thymocytes. Antibody 158.4D3 recognizes all CD45 molecules containing the A region exon (1,2).

**References:** 1) Leukocyte Typing III (A.J. McMichael, et al, eds.) Oxford University Press, Oxford, (1987) p. 788-817. 2) A. Gaya, et al, (1990) Intl Immunol 2:685-689. 3.) I.S. Trowbridge & M.L. Thomas, (1994) Annu Rev Immunol 12: 85-116.

**STORAGE CONDITIONS:** *Store at 2 - 5°C.* Freeze/thawing not recommended.

**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% Na<sub>3</sub>N (as a preservative).

**PRODUCTION:** Antibody from (low FBS containing) tissue culture supernatant was Protein A purified to >95% mouse immunoglobulin by SDS-PAGE (<1% bovine immunoglobulin), and reacted with NHS-Biotin. Unconjugated Biotin was removed from conjugate using a desalting column.

**PERFORMANCE:** Five x 10<sup>5</sup> cultured human **Raji** cells were washed and incubated 45 minutes on ice with 80 µl of anti-CD45RA/Biotin at **5 µg/ml**. Cells were washed twice and incubated 2<sup>o</sup> reagent Streptavidin/R-PE (Catalog #253-050) after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of **2.86** log<sub>10</sub> fluorescent units when compared to a Mouse IgG2a/Biotin negative control (Catalog #281-030) at a similar concentration. Binding was blocked when cells were pre incubated 10 minutes with 20 µl of 0.5 mg/ml anti-CD45RA antibody (Catalog #394-020).

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

**Binding of anti-CD45RA/Biotin to human raji cells**

