## PERFORMANCE DATA SHEET

1817

## Monoclonal anti-human CD45R/Biotin\*

*mAb name/Clone:* 351C5 *Isotype:* Mouse IgM

Immunogen: Periperal blood mononuclear cells

**CATALOG#: 195-030 QUANTITY: 100 μg** 

CONCENTRATION: 1.0 mg/ml

**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. CD45 plays an essential role in lymphocyte activation. Antibody 351C5 recognizes the CD45R isoforms of about 200-220 kd.

References: L.J. Murray, et al, (1985) Clin Exp Immunol **59:** 315-326. 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. 394-397. D. Leitenberg, et al, (1996) J Exp Med **183:** 249-259.

**STORAGE CONDITIONS:** *Store at 2 - 5<sup>o</sup>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% NaN<sub>3</sub> (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.

PERFORMANCEBriefly, 5 x 10<sup>5</sup> ficoll prepared human peripheral blood mononuclear cells were washed and

pre incubated ~10 minutes with 20  $\mu$ l of 250  $\mu$ g/ml human IgG (to block nonspecific binding) after which they were incubated 45 minutes on ice with 80  $\mu$ l of anti-CD45R/Biotin at **5**  $\mu$ g/ml. Cells were washed twice and incubated with 20 reagent Streptaviden/R-PE (catalog #253-050), after which they were washed three times, fixed and analyzed by FACS. A net **72%** sub population of the cells stained positive with a mean shift of **2.21**  $\log_{10}$  fluorescent units when compared to a Mouse IgM/Biotin negative control (Catalog #290-030) at a similar concentration. Binding was blocked when cells were pre incubated 10 minutes with 20  $\mu$ l of 0.5 mg/ml anti-CD45R antibody (Catalog #195-020).

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

Binding of anti-CD45R/Biotin to human cell types

