

**PERFORMANCE DATA SHEET**

1817

**Monoclonal anti-human CD34/R-PE \*****mAb name/Clone:** 43A1**Isotype:** Mouse IgG3 $\kappa$ **Immunogen:** Human KG-1a tumor cells**CATALOG#:** 183-050**QUANTITY:** 120 tests**VOLUME :** 0.2 ml**WORKING DILUTION:** 1:50 (or use 1.6 $\mu$ l of concentrated stock per 5 x 10<sup>5</sup>-cell test)

**INFORMATION:** Human CD34 is an unusual glycosylated membrane protein exclusively expressed on immature hematopoietic cells and on endothelial cells. CD34 may have a role in cell adhesion. CD34 has extensive utility for bone marrow transplantation. Antibody 43A1 recognizes a class 2 epitope of the 110 kd CD34 molecule.

**References:** H.J. Bühring, et al, (1991) *Leukemia* **5**: 854-860. *Leukocyte Typing V* (S.F. Schlossman, et al, eds.) Oxford University Press, Oxford, (1995) p. 840-874. R.H. Collins, (1994) *Stem Cells* **12**: 577-585. T.L. Holyoake & M.J. Alcorn, (1994) *Blood Reviews* **8**: 113-124.

**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, 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 0.5 mg/ml with an A<sub>565</sub>/A<sub>280</sub> ratio of 2.88.

**PERFORMANCE:** Five x 10<sup>5</sup> cultured **KG-1** human tumor cells were washed and pre incubated 5 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-CD34/R-PE at a 1:50 dilution (10 $\mu$ g/ml). Cells were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of 2.35 log<sub>10</sub> fluorescent units when compared to a Mouse IgG3/PE negative control (Catalog #287-050). Binding was blocked when cells were pre incubated 10 minutes with 20  $\mu$ l of 0.5 mg/ml anti-CD34 antibody (Catalog #183-020).

\* *Research Use Only. Not for use in Diagnostic procedures.*

**Binding of anti-CD34/PE to human KG-1 cells**

