PERFORMANCE DATA SHEET

1817

Monoclonal anti-human CD34/R-PE*

mAb name/Clone: **43A1** *Isotype:* Mouse IgG3κ

Immunogen: Human KG-1a tumor cells

CATALOG#: 183-050 QUANTITY: 120 tests

VOLUME: 0.2 ml

WORKING DILUTION: 1:50 (or use 1.6µl of concentrated stock per 5 x 10⁵-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^oC*. 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% 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 **0.5 mg/ml** with an A_{565}/A_{280} ratio of 2.88.

PERFORMANCE: Five x 10^5 cultured **KG-1** human tumor cells were washed and pre incubated 5 minutes with 20 μl of 250 μg/ml human IgG (to block nonspecific binding) after which they were incubated 45 minutes on ice with 80 μl 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_{10} fluorescent units when compared to a Mouse IgG3/PE negative control (Catalog #287-050) at a similar concentration. Binding was blocked when cells were pre incubated 10 minutes with 20 μl of 0.5 mg/ml anti-CD34 antibody (Catalog #183-020).

*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-CD34/PE to human KG-1 cells

