

# PERFORMANCE DATA SHEET

1719

## Monoclonal anti-human CD34/FITC\*

**mAb name/Clone:** 43A1

**Isotype:** Mouse IgG3 $\kappa$

**Immunogen:** Human KG-1a tumor cells

**CATALOG#:** 183-040

**QUANTITY:** 120 tests

**VOLUME IN VIAL:** 0.2ml

**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, 100 mM Potassium Chloride, 150mM NaCl, 5% Glycerol, 0.2% BSA, 0.04% NaN<sub>3</sub> (as a preservative).

**PRODUCTION:** Protein A purified antibody from tissue culture supernatant was reacted with FITC. Unconjugated FITC was separated from antibody/FITC conjugate by desalting column. The antibody/FITC conjugate is at **0.5 mg/ml** with a Fluorescein/IgG molar ratio of 8.6.

**PERFORMANCE:** Five x 10<sup>5</sup> cultured human **KG-1** cells per tube were washed and pre incubated ~5 minutes with 20  $\mu$ l of 250  $\mu$ g/ml human IgG (to block non specific binding) after which they were incubated 45 minutes on ice with 80  $\mu$ l of anti-CD34/FITC 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 **1.17** log<sub>10</sub> fluorescent units when compared to a Mouse IgG3/FITC negative control (Catalog #287-040). 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/FITC to human KG-1 cells**

