

PERFORMANCE DATA SHEET
2411

Monoclonal anti-human CD34/APC*

mAb name/Clone: 43A1
Isotype: Mouse IgG3 κ
Immunogen: Human KG-1a tumor cells

CATALOG#: 183-060

QUANTITY: 120 tests

VOLUME IN VIAL: 0.2 ml

WORKING DILUTION: 1:50 (or use 1.6 μ l 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°C. Do not freeze! 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 cross-linked Allophycocyanin through a sulfo-ester linkage. Unconjugated antibody was removed using size exclusion chromatography. Antibody conjugate is at **0.5 mg/ml** with an A₆₅₀/A₂₈₀ ratio of 2.25.

PERFORMANCE: Five x 10⁵ cultured **KG-1** human tumor cells were washed and pre incubated 5 minutes with 20 μ l of 250 μ g/ml human IgG (to block nonspecific binding) after which they were incubated 45 minutes on ice with 80 μ l of anti-CD34/APC at a **1:50** dilution (10 μ g/ml). Cells were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of **2.35** log₁₀ 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 μ 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/APC to human KG-1 cells

