

PERFORMANCE DATA SHEET

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Monoclonal anti-human CD34/Biotin***mAb name/Clone:** 43A1**Isotype:** Mouse IgG3 kappa**Immunogen:** Human KG-1a tumor cells**CATALOG#:** 183-030**QUANTITY:** 100 µg**CONCENTRATION:** 1.0 mg/ml

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 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% NaN₃ (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.

PERFORMANCE: Five x 10⁵ cultured **KG-1** human tumor cells were washed and pre incubated ~5 minutes with 20 µl of 250 µg/ml human IgG (to block non specific binding) after which they were incubated 45 minutes on ice with 80 µl of anti-CD34/Biotin at **10 µg/ml**. Cells were washed twice and incubated with 2^o reagent Streptavidin/R-Phycoerythrin (Catalog #253-050), after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of **2.2 log₁₀** fluorescent units when compared to a Mouse IgG3/Biotin negative control (Catalog #287-030). Binding was blocked when cells were pre incubated 10 minutes with 20 µl of 0.5 mg/ml anti-CD34 antibody (Catalog #183-020).

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

Binding of anti-CD34/Biotin to human KG-1 cells