

PERFORMANCE DATA SHEET

1825

Monoclonal anti-human CD104 ($\beta 4$ Integrin)/Biotin*

mAb name/Clone: UMA9

Isotype: Mouse IgG2a

Immunogen: UM-SCC-1, human squamous cell carcinoma

CATALOG#: 325-030

QUANTITY: 100 μ g

CONCENTRATION: 1.0 mg/ml

INFORMATION: Human CD104 ($\beta 4$ integrin) associates with the $\alpha 6$ integrin chain and binds to laminin and epiligrin and likely has cell-cell adhesion functions. CD104 is involved in signal transduction. Antibody UMA9 recognizes the CD104 molecule of about 205 kd and partially blocks laminin binding.

References: K.A. Kimmel & T.E. Carey, (1986) *Cancer Res* **46**: 3614-3623. C VanWaes, et al, (1991) *Cancer Res* **51**: 2395-2402. *Leukocyte Typing V* (S.F. Schlossman, et al, eds.) Oxford University Press, Oxford, (1995) p. 1655-1663, 1667-1668. F. Mainiero, et al, (1995) *EMBO J* **14**: 4470-4481.

STORAGE CONDITIONS: Store at 2 - 5°C. Freeze/thawing not recommended.

PRODUCT STABILITY: Product should retain activity for at least 6 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 was Protein A purified from (low FBS containing) tissue culture supernatant. It was then conjugated to NHS-Biotin. Antibody conjugate was separated from free biotin using a desalting column.

PERFORMANCE: Five x 10⁵ cultured human UM-SCC (Squamous cell carcinoma) cells were washed and incubated 45 minutes on ice with 80 μ l of anti-CD104/Biotin at a concentration of 10 μ g/ml. Cells were then washed twice and incubated 45 minutes 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 2.24 log₁₀ fluorescent units when compared to a Mouse IgG2a/Biotin negative control (Catalog #281-030) at a similar concentration. Binding was blocked when cells were pre incubated 10 minutes with 20 μ l of 0.5 mg/ml anti-CD104 antibody (Catalog #325-020).

**This Product is intended for Laboratory Research use only.*

Binding of anti-CD104/Biotin +SA/PE to human UM-SCC cells

