

PERFORMANCE DATA SHEET

1818

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

mAb name/Clone: UMA9

Isotype: Mouse IgG2a

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

CATALOG#: 325-050

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 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. 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: Antibody was Protein A purified from (low FBS containing) tissue culture supernatant, and conjugated to R-Phycoerythrin through a sulfo-ester linkage. Unconjugated antibody was removed using size exclusion chromatography. Antibody conjugate is at **0.5 mg/ml** with an A₅₆₅/A₂₈₀ ratio of 2.99.

PERFORMANCE: Five x 10⁵ UM-SCC (Squamous cell carcinoma line) cells were harvested by trypsinization. Cells were washed and pre incubated 5 minutes with 20 μ l of 250 μ g/ml human IgG (to block non specific binding) after which they were incubated 45 minutes on ice with 80 μ l of anti-CD104/R-PE 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 **2.20** log₁₀ fluorescent units when compared to a Mouse IgG2a/R-PE negative control (Catalog #281-050) at a similar concentration. Binding was blocked when cells were pre incubated 10 minutes with 20 μ l of 0.5 mg/ml anti-CD104 antibody (Catalog #325-020).

***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-CD104/R-PE to hman cell lines

