## PERFORMANCE DATA SHEET

3326

## Ancell

## Monoclonal anti-human CD104 (β4 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 1.6µl of concentrated stock per 5 x 10<sup>5</sup>-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^{\circ}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:\_\_\_\_\_

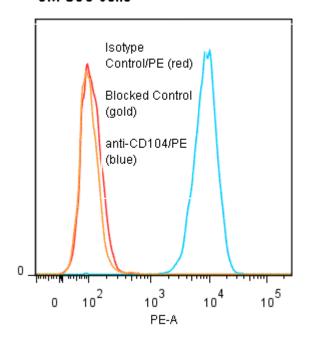
**BUFFER:** 50 mM Sodium Phosphate pH 7.5, 500 mM Potassium Chloride, 150mM NaCl, 15% Glycerol, 0.2% BSA, 0.04% NaN<sub>3</sub> (as a preservative).

**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  $A_{565}/A_{280}$  ratio of 2.99.

**PERFORMANCE:** Five x 10<sup>5</sup> **UM-SCC** (Squamous cell carcinoma line) cells were harvested by trypsinization. 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-CD104/R-PE at a **1:50** dilution (10μg/ml). Cells were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of **1.90** log<sub>10</sub> fluorescent units when compared to a Mouse IgG2a/R-PE negative control (Catalog #281-050). Binding was blocked when cells were pre incubated 10 minutes with 20 μl of 0.5 mg/ml anti-CD104 antibody (Catalog #325-020).

## Binding of anti-CD104/PE to human UM-SCC cells



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<sup>\*</sup> Research Use Only. Not for use in Diagnostic procedures.