

# 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  $\mu$ 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% Na<sub>3</sub> (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 10<sup>5</sup> cultured human UM-SCC (Squamous cell carcinoma) cells were washed and incubated 45 minutes on ice with 80  $\mu$ l of anti-CD104/Biotin at a concentration of 10  $\mu$ g/ml. Cells were then washed twice and incubated 45 minutes with 2<sup>o</sup> 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 log<sub>10</sub> fluorescent units when compared to a Mouse IgG2a/Biotin negative control (Catalog #281-030). Binding was blocked when cells were pre incubated 10 minutes with 20  $\mu$ l of 0.5 mg/ml anti-CD104 antibody (Catalog #325-020).

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

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

