

PERFORMANCE DATA SHEET

2436

Monoclonal anti-human CD271(NGFR)/Biotin*

mAb name/Clone: ANC271/3D7

Isotype: Mouse IgG1k

Immunogen: Recombinant soluble human CD271

CATALOG#: 271-030

QUANTITY: 100 µg

CONCENTRATION: 1.0 mg/ml

INFORMATION: The p75 low affinity human Nerve Growth Factor receptor CD271(NGFR, TNFRSF16) is expressed on a variety of tissue types including a subset of splenic and nodal lymphocytes. Presence of this receptor supports uptake of intracellular calcium, but not mobilization (3). CD271 is a stem cell marker for hematopoietic(5,6,7), stromal (8) as well as cancer cells (9,10). CD271 has been reported to inhibit differentiation of mesenchymal cells into various lineages(11).

Antibody ANC271/3D7 binds to recombinant CD271-muIg (cat# 527-020) in EIA, and to endogenous CD271 on cell surface of human Reh cells.

REFERENCES: 1) Brodie C, E W Gelfand (1992) *Journal of Immunology*. **148**(11): 3492-3497. 2) Fantini F, O. Johansson (1992) *Journal of Investigative Dermatology*. **99**(6): 734-742. 3) Jiang H, G Gurogg, et al.(1999) *J Biol Chem* **274**(37): 26209-16. 4) Khwaja F, D Djakiew, et al (2004) *Cancer Res* **64**(17): 6207-13. 5) Flores-Torales E, Cuneo-Pareto S, et al. (2010) *Folia Histochem Cytobiol*. **48**(4):682-6. 6) Kuçi S, Bader P, et al. (2010) *Haematologica*. **95**(4):651-9. 7) Hermida-Gómez T, Blanco FJ, et al. (2011) *Tissue Eng Part A*. **17**(7-8):1169-79. 8) Jones E, McGonagle D, et al. (2010) *Arthritis Rheum*. **62**(7):1944-54. 9) Boiko AD, Weissman IL, et al. (2010) *Nature* **466**(7302):133-7. 10) Civenni G, Sommer L, et al. (2011) *Cancer Res*. **71**(8):3098-109. 11) Mikami Y, Honda MJ, et al. (2011) *Stem Cells Dev*. **20**(5):901-13.

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: _____

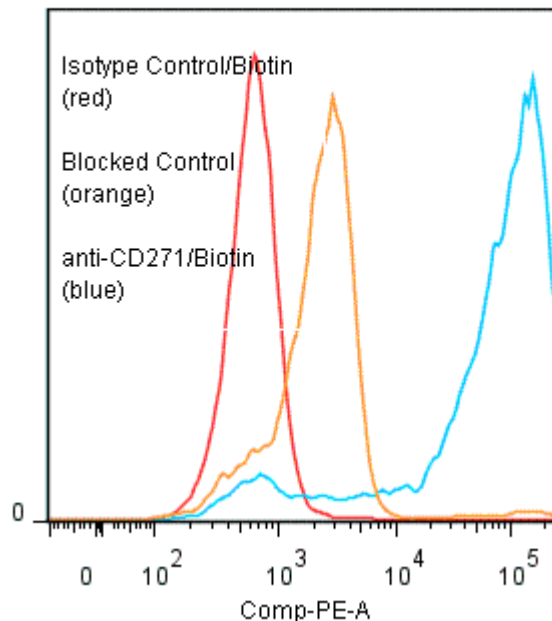
BUFFER: 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl, 5% Glycerol, 0.2% BSA, 0.04% Na₃ (as a preservative).

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 human SW480 cells were harvested by EDTA, washed and pre incubated with 20 ul of 300 µg/ml human IgG (to block non specific binding), after which they were incubated 45 minutes on ice with 80 µl of anti-CD271/Biotin at a concentration of 10 ug/ml. Cells were then washed twice and incubated with secondary reagent Streptavidin/R-PE (cat# 260-050). They were then washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of 2.17 log₁₀ fluorescent units when compared to a Mouse IgG1/Biotin negative control (Catalog # 278-030). Binding was blocked when cells were pre incubated 10 minutes with 20 µl of 0.5 mg/ml anti-CD271 antibody (Catalog #271-020).

Binding of anti-CD271/Biotin + SA/PE to human SW480 cells



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