

**PERFORMANCE DATA SHEET**

2002

**Monoclonal anti-human CD271(NGFR)\***

**mAb name/Clone:** ANC271/3D7

**Isotype:** Mouse IgG1κ

**Immunogen:** Recombinant soluble human CD271

**CATALOG#:** 271-820 (Preservative-free)

**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. Open under aseptic conditions. Freeze/Thawing is not recommended.

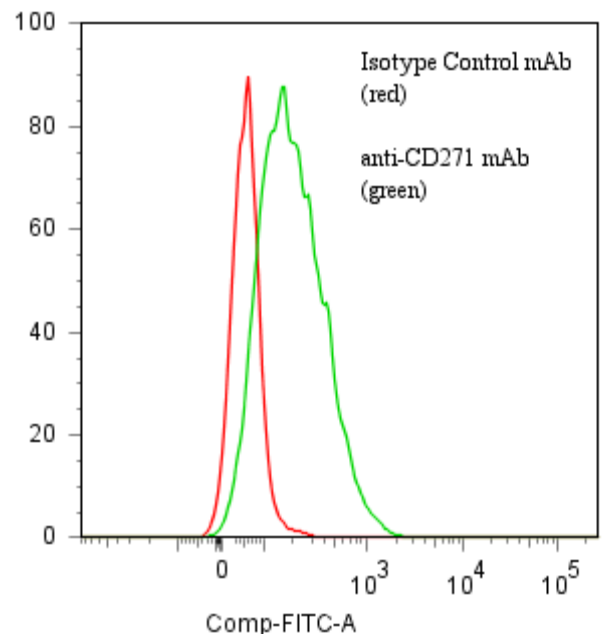
**PRODUCT STABILITY:** Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date: \_\_\_\_\_

**BUFFER:** 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl.

**PRODUCTION:** Antibody was Protein A purified from (low FBS containing) tissue culture supernatant. Purity was >95% Immunoglobulin by SDS-PAGE with less than 1% Bovine Immunoglobulin. Product was 0.2 µm filtered and vialled under aseptic conditions.

**PERFORMANCE:** Five x 10<sup>5</sup> cultured human Reh cells per tube were pelleted and pre incubated 5 minutes with 20µl of human IgG at 300µg/ml (to reduce non specific binding) after which they were washed and incubated 45 minutes on ice with 80 µl of anti-CD271 antibody(ANC271/3D7) at **5 µg/ml**. Cells were washed twice and incubated with 2<sup>o</sup> reagent Goat anti-Mouse IgG/FITC (Catalog #232-011) after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of **0.76** log<sub>10</sub> fluorescent units when compared to a Mouse IgG1 negative control (Catalog #278-010) at a similar concentration.

**Binding of anti-CD271 mAb +GAM/FITC to human Reh cells**



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