

# PERFORMANCE DATA SHEET

2436

## Monoclonal anti-human CD271(NGFR)/FITC\*

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

**Isotype:** Mouse IgG1k

**Immunogen:** Recombinant soluble human CD271

**CATALOG#:** 271-040

**QUANTITY:** 120 tests

**VOLUME IN VIAL:** 0.2ml

**WORKING DILUTION:** 1:50 (or use 1.6µl of concentrated stock per  $5 \times 10^5$ -cell test)

**INFORMATION:** The p75 low affinity human Nerve Growth Factor receptor CD271(NGRF, 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 is not recommended. 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, 100 mM Potassium Chloride, 150mM NaCl, 5% Glycerol, 0.2% BSA, 0.04% NaN<sub>3</sub> (as a preservative).

**PRODUCTION:** Protein A purified antibody from tissue culture supernatant was reacted with FITC. Unconjugated FITC was separated from antibody/FITC conjugate by desalting column. The antibody/FITC conjugate is at 0.5 mg/ml with a Fluorescein/IgG molar ratio of 9.2.

**PERFORMANCE:** Five  $\times 10^5$  cultured human SW480 cells were harvested by EDTA, washed and pre incubated with 20 µl of 300 µg/ml human IgG (to block non specific binding), after which they were incubated 45 minutes on ice with 80 µl of product at a 1:50 dilution (10 µg/ml). They were then washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of 1.55 log<sub>10</sub> fluorescent units when compared to a Mouse IgG1/FITC negative control (Catalog # 278-040). Binding was blocked when cells were pre incubated 10 minutes with 20 µl of 0.5 mg/ml anti-CD271 antibody (Catalog #271-020).

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

**Binding of anti-CD271/FITC to human SW480 cells**

