## 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 1.6 $\mu$ l of concentrated stock per 5 x 10<sup>5</sup>-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.

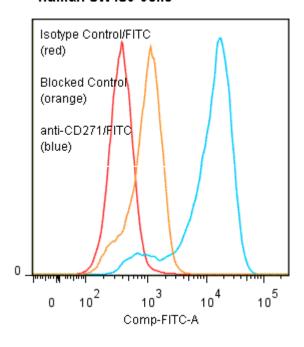
**STORAGE CONDITIONS:** *Store at 2 - 5<sup>o</sup>C*. Freeze/Thawing is not recommended. Protect from light. **PRODUCT STABILITY:** Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date:

**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 x  $10^5$  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 product at a 1:50 dilution (10 ug/ml). They were then washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of **1.55**  $\log_{10}$  fluorescent units when compared to a Mouse IgG1/FITC negative control (Catalog # 278-040) at a similar concentration. 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/FITC to human SW480 cells



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