

**PERFORMANCE DATA SHEET**

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**Monoclonal anti-human CD357 (GITR, AITR )/Biotin\***

**mAb name/Clone:** ANC5A3

**Isotype:** Mouse IgG3κ

**Immunogen:** Recombinant human GITR, PHA stimulated human PBL

**CATALOG#:** 368-030

**QUANTITY:** 100 µg

**CONCENTRATION:** 1.0 mg/ml

**INFORMATION:** Glucocorticoid induced Tumor Necrosis Factor receptor family related gene (GITR, AITR) is a type 1 228 amino acid transmembrane protein that has been designated TNFRSF18. GITR is expressed mainly by CD4+ CD25+ T lymphocytes. Its engagement by antibodies or its ligand (GITRL) induces a costimulatory signal which can break T cell suppression (2). GITR has been implicated as a regulatory mechanism in anti-parasitic immune responses (4), and is involved with Macrophages activation in atherosclerotic plaque formation (3). Clone ANC5A3 binds to human GITR in EIA and on stimulated cell surface in FACS. Preincubation of the receptor with an excess of this mAb will block binding of recombinant GITR Ligand.

**References:** 1) Gurney AL, et al. (1999) *Curr Biol* **9**(4): 215-218. 2) Ji HB, et al. (2004) *J Immunol* **172**(10): 5823-5827. 3) Kim WJ, WH Lee, et al. (2006) *Immunology* **119**(3): 44-9. 4) Furze RC, Selkirk ME, et al. (2006) *Microbes Infect* **8**(12-13): 2803-10. 5) Kohm AP, SD Miller, et al. (2004) *J Immunol* **172**: 4686-4690. 6) McHugh, R.S. et al. (2002) *Immunity* **16**:311. 7) Shin, H.H. et al. (2002) *FEBS Lett.* **514**:275. 8). Shimizu, J. et al. (2002) *Nature Immunol.* **3**:135.

**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, 500 mM Potassium Chloride, 150mM NaCl, 5% Glycerol, 0.2% BSA, 0.04% NaN<sub>3</sub> (as a preservative).

**PERFORMANCE:** Ficoll prepared human peripheral blood mononuclear cells were stimulated 5 days in culture with PHA. Five x 10<sup>5</sup> cells per tube were washed and pre incubated 5 minutes with 20 µl of 250 µg/ml human IgG (to block non specific binding) after which they were incubated 45 minutes on ice with 80 µl of anti-GITR/Biotin at a concentration of 10 µg/ml. Cells were washed twice and incubated with 2° reagent Streptavidin/ R-PE (cat # 232-050), after which they were washed three times, fixed and analyzed by FACS. A 35.6% sub population of the cells stained positive with a mean shift of 1.09 log<sub>10</sub> fluorescent units when compared to a Mouse IgG3/Biotin negative control (Catalog # 287-030). Binding was blocked when cells were pre incubated with a 10-fold excess of unlabeled anti-CD357 mAb (cat #368-020).

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

**Binding of anti-CD357(GITR)/Biotin +SA/PE to stimulated human PBL**

