

# PERFORMANCE DATA SHEET

2402

## Monoclonal anti-human GITR (AITR)\*

**mAb name/Clone:** ANC7D6-1B7

**Isotype:** Mouse IgMκ

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

**CATALOG#:** 268-020

**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 ANC7D6-1E7 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 is not recommended. Open under aseptic conditions.

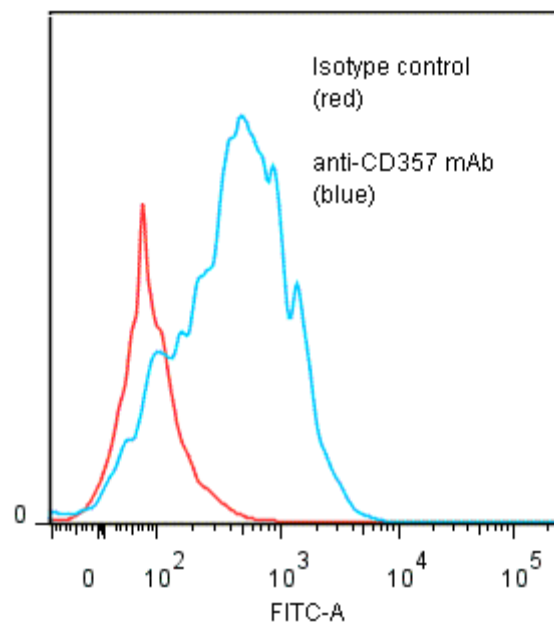
**PRODUCT STABILITY:** Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date:\_\_\_\_\_

**BUFFER:** 50 mM Sodium Phosphate pH 7.5, 500 mM Potassium Chloride, 150mM NaCl.

**PRODUCTION:** Antibody from (low FBS containing) tissue culture supernatant was purified to 95% mouse immunoglobulin by SDS-PAGE (<1% bovine immunoglobulin) using size exclusion chromatography. Product was 0.2µ sterile filtered and vialled under aseptic conditions.

**PERFORMANCE:** Ficoll prepared human peripheral blood mononuclear cells (PBMC) 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 ug/ml human IgG (to block non specific binding) after which they were incubated 45 minutes on ice with 80 µl of anti-GITR antibody at 5 µg/ml. Cells were washed twice and incubated with 2<sup>o</sup> reagent Goat anti-Mouse IgG/FITC (Catalog #232-011; This reagent cross reacts well with Mouse IgM), after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of 0.82 log<sub>10</sub> fluorescent units when compared to a Mouse IgM negative control (Catalog #290-010).

**Binding of anti-CD357(GITR) mAb +GAM/FITC to stimulated human PBL**



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