

PERFORMANCE DATA SHEET

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Monoclonal anti-human CD278 (ICOS)*

mAb name/Clone: ANC6C6

Isotype: Mouse IgG1κ

Immunogen: Human HPB-MLT cells, human ICOS-muIg fusion protein

CATALOG#: 265-020

QUANTITY: 100 µg

CONCENTRATION: 1.0 mg/ml

INFORMATION: The inducible costimulator CD278 (ICOS, T cell activation molecule H4) is similar to human CD28 (24% homology), and plays an analogous role in the T cell activation process. Secondary signaling through CD28 or ICOS results in discrete cytokine secretion profiles by the activated T cells.¹ Signaling by either molecule is effectively down regulated by CD152 (CTLA-4) engagement.² Human GL50 is a member of the B7 family sharing ~20% homology with CD80 (B7-1) and CD86 (B7-2), and has been shown to be the ligand for ICOS.³ Two RNA splice variants exist for this molecule, differing only in the cytoplasmic domain.⁴

Antibody ANC6C6 binds to recombinant ICOS-muIg in EIA, and to the surface of HPB-MLT cells in Flow cytometry. Additionally, it blocks binding of recombinant GL50-muIg to HPB-MLT cells.

References: 1) Beier, K.C., R.A. Kroczek, et al. 2000, *Eur J Immunol.* **30**(12):3707-3717. 2) Riley, J.L., C.H. June, et al. 2001, *J. Immunol.* **166**: 4943-4948. 3) Ling, V., M. Collins, et al. 2000, *J. Immunol.* **164**: 1653-1657. 4) Ling, V., M. Collins, et al. 2001, *J. Immunol.* **166**: 7300-7308.

STORAGE CONDITIONS: Store at 2 - 5°C. 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, 0.5 mg/ml Gentamicin Sulfate (as a preservative).

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.

PERFORMANCE: Five x 10⁵ human PBMC were stimulated in culture 3 days with 5 ug/ml PHA, after which Five x 10⁵ cells per tube were washed and pelleted. They were then pre incubated with 20 ul of 300 ug/ml human IgG (to reduce non specific binding) after which they were washed incubated 45 minutes on ice with 80 µl of anti-human CD278(ICOS) antibody at 5 µg/ml. Cells were washed twice and incubated with Goat-anti-Mouse/FITC, after which they were washed twice, fixed and analyzed by FACS using a lymphoid gate. A **48% sub population** of the cells stained positive with a mean shift of 1.0 log₁₀ fluorescent units when compared to isotype control Mouse IgG1 antibody (catalog # 278-010).

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

Binding of anti-CD278(ICOS) mAb +GAM/FITC to stimulated human PBL

