

# PERFORMANCE DATA SHEET

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## Monoclonal anti-human-CD275 (ICOSL, GL50, B7RP-1)/Biotin\*

**mAb name/Clone:** ANC4E3

**Isotype:** Mouse IgG1κ

**Immunogen:** Human Raji cells, human GL50-muIg fusion protein

**CATALOG#:** 263-030

**QUANTITY:** 100 µg

**CONCENTRATION:** 1.0 mg/ml

**INFORMATION :** The inducible costimulator (ICOS, T cell activation molecule H4) is similar to human CD28 (24% homology), and plays an analogous role in the T cell activation process. Unlike CD28, ICOS is only expressed on activated T cells. Secondary signaling through CD28 or ICOS results in discrete cytokine secretion profiles by the activated T cells(1). Engagement of CD152 (CTLA-4) anergizes cells costimulated with either CD28 and ICOS(2). Signaling through ICOS is particularly important in progression of TH2 immune response (5). The receptor for human ICOS is CD275 (ICOS L, GL50), a member of the B7 family sharing ~20% homology with CD80 (B7-1) and CD86 (B7-2)(3). Two RNA splice variants exist for this molecule, differing only in the cytoplasmic domain(4). Blockade of the ICOS-ICOSL interaction in mice improves allograft survival(6) and reduces EAE(7). Antibody ANC4E3 binds to recombinant CD275-muIg in EIA and to cell surface CD275 on Raji cells in FACS.

**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. 5) K.C. Beier, et al, (2000) *Eur J Immunol* 30: 3707-3717. 6) E. Ozkaynak, et al, (2001) *Nat Immunol* 2: 591-596. 7) J.B. Rottman, et al, (2001) *Nat Immunol* 2: 605-611.

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

**PRODUCTION:** Antibody from (low FBS containing) CHO cell tissue culture supernatant was purified and reacted with NHS-Biotin. Unconjugated Biotin was removed from conjugate using a desalting column.

**PERFORMANCE:** Anti-CD275/Biotin was reactive with immobilized recombinant ICOSL(CD275)-muIg (Cat #575-020) in EIA with an EC<sub>50</sub> of **25 ng/ml**. Streptavidin/HRP was used as a secondary detection reagent.

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

**Binding of ANC4E3/Biotin +SA/HRP in EIA**

