## PERFORMANCE DATA SHEET 2519 Monoclonal anti-human CD28/Biotin\* (stimulating)



*mAb name/Clone:* ANC28.1/5D10 *Isotype:* Mouse IgG1κ *Immunogen:* Human CD28 Ig fusion protein and HPB-MLT human tumor cells

## CATALOG#: 177-030 QUANTITY: 100 µg

## CONCENTRATION: 1.0 mg/ml

**INFORMATION:** Human CD28 is an important costimulatory molecule found on all CD4+ T cells and on about half of the CD8+ T cells. T cell activities attributed to CD28 include prevention of anergy, induction of cytokine gene transcription, stabilization of cytokine mRNA and activation of CD8+ cytotoxic T lymphocytes. the ligands for CD28 identified as CD80(B7-1) and CD86(B7-2), are immunoglobulin superfamily monomeric transmembrane glycoproteins of 60 kd and 80 kd respectively. Anti-CD28 antibodies have recently been shown to have a strong adjuvant effect when conjugated to the immunogen (4). Antibody ANC28.1 recognizes CD28 expressed on human T cells and also on BHK cells transfected with human CD28. Monomeric and cross linked ANC28.1 will stimulate expression of IL-2 from CD28<sup>+</sup> cells. *References:* (1) M.K. Jenkins & J.G. Johnson, (1993) *Curr Opin Immunol* 5: 361-367. (2) 61st Forum in Immunology, (1995) *Res Immunol* 146: 127-205. (3) I. Kariv, A. Truneh & R.W. Sweet, (1996) *J Immunol* 157: 29-38. (4) J. Carling, et al, (2003) *J Immunol* 33: 135-142.

**STORAGE CONDITIONS:** Store at 2 - 5<sup>o</sup>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) tissue culture supernatant was Protein A purified to >95% mouse immunoglobulin by SDS-PAGE (<1% bovine

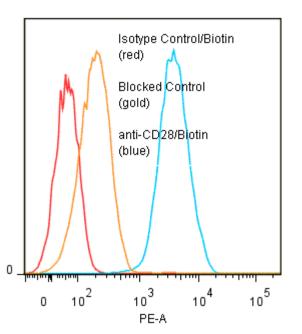
immunoglobulin), and reacted with NHS-Biotin.

Unconjugated Biotin was removed from conjugate using a desalting column.

Binding of anti-CD28/Biotin +SA/PE to HPB-MLT cells

**PERFORMANCE:** Five x  $10^5$  cultured **HPB-MLT** cells were washed and incubated 45 minutes on ice with 80 µl of anti-CD28/Biotin at **5 µg/ml**. Cells were washed twice and incubated with  $2^{\circ}$  reagent Streptavidin/R-Phycoerythrin (Catalog #253-050), after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of **1.88**  $\log_{10}$  fluorescent units when compared to a Mouse IgG1/Biotin negative control (Catalog #278-030). Binding was blocked when cells were pre incubated 10 minutes with 20 µl of 0.5 mg/ml anti-CD28 antibody (Catalog #177-020).

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



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