## PERFORMANCE DATA SHEET

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## Monoclonal anti-human CD279(PD-1)/Biotin\*



*mAb name/Clone:* ANC4H6 *Isotype:* Murine IgG1κ

Immunogen: Recombinant human CD279

**CATALOG#: 279-030 QUANTITY: 100 μg** 

**CONCENTRATION: 1.0 mg/ml** 

**INFORMATION:** Human CD279 (PD-1, Programmed death 1) is a 55 kd Ig superfamily member with sililarity to CD28 and CD152(CTLA-4). It is expressed on activated T and B and myeloid cells, and engagement by its ligands PD-L1 (CD274, B7-H1) or PD-L2 (B7-DC) can inhibit proliferation and cytokine expression. In mice blockade of PD-1 ligand interaction has been used to augment T cell anti cancer responses (3,4,5).

Anti-CD279 antibody clone ANC4H6 binds to CD279 present on PHA activated PBMC in FACS, and binds to recombinant CD279 in EIA. Pre incubation of recombinant CD279-coated plates with ANC4H6 blocks binding of biotinylated recombinant CD273 in EIA.

**References:** 1) Ishida et al. (1992) *EMBO J* 11(11):3887-95. 2) Carreno BM, M Collins, et al. (2001) *Annu Rev Immunol* 20:29. 3) MA Curran, Allison JP, et al. (2010) *PNAS* 107(9): 4275-80. 4) Mangsbo SM, TH Totterman, et al. (2010) *J Immunotherapy* 33(3):225. 5) Hirano F, L Chen, et al. (2005) *Canc Res* 65: 1089.

**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:\_\_\_\_\_

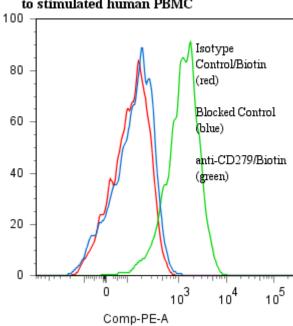
**BUFFER:** 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl, 5% Glycerol, 0.2% BSA, 0.04% NaN<sub>3</sub> (as a preservative).

**PRODUCTION:** Antibody from (low FBS containing) tissue culture supernatant was Protein A purified to 95% Immunoglobulin by SDS-PAGE, and reacted with NHS-Biotin.

Unconjugated Biotin was removed from conjugate using a desalting column.

**PERFORMANCE:** Ficoll prepared human peripheral blood mononuclear cells (**PBMC**) were stimulated 5 days in culture with 5  $\mu$ g/ml Phytohemagglutanin (PHA). Five x 10<sup>5</sup> cells per tube were pre incubated 10 minutes with 250  $\mu$ g/ml human IgG (to block nonspecific binding) after which they were incubated 45 minutes on ice with 80  $\mu$ l of product at a concentration of **10**  $\mu$ g/ml. Cells were then washed twice and incubated 45 minutes with 20  $\mu$ l of 2<sup>o</sup> reagent Streptavidin/R-PE (Catalog #253-050), after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of **1.04** log<sub>10</sub> fluorescent units when compared to a Mouse IgG1/Biotin negative control (Catalog #278-030) at a similar concentration. Binding was blocked when reagent was pre incubated 10 minutes with a ten-fold excess of recombinant CD279-muIg.

Binding of anti-CD279(PD-1)/Biotin +SA/PE to stimulated human PBMC



\*This Product is intended for Laboratory Research use only.

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