

**PERFORMANCE DATA SHEET**

2214

**Monoclonal anti-human CD274(B7-H1, PD-L1)\*/Biotin\***

**mAb name/Clone:** ANC6H1

**Isotype:** Mouse IgG1κ

**Immunogen:** Recombinant human CD274

**CATALOG#:** 274-030

**QUANTITY:** 100 µg

**CONCENTRATION:** 1.0 mg/ml

**INFORMATION:** CD274 (B7-H1, PD-L1, Programmed Death Ligand) is a member of the B7 family and is expressed on a variety of tissues including lymphoid cells. It plays an important role in regulation of T cell activation, and is involved in progression of cancer, arthritis and HIV infection (3). CD274 binding to its receptor CD279 (PD-1) on activated T cells can decrease proliferation. Conversely, ligation of CD279 on primed T cells can stimulate IL-10 production. High levels of CD274 present in Renal cell carcinoma is associated with poor prognosis (1). Tumor expressed CD274 can increase apoptosis of tumor specific T cells resulting in better tumor cell survival (2). Gamma Interferon and PHA can up regulate CD274 expression on T cells. Antibody ANC6H1 binds to recombinant CD274 and native cell surface CD274 expressed on stimulated PBMC.

**REFERENCES:** 1)Cancer Research (April 2006) **66**:3381. 2)J Molecular Medicine (Feb 2004) **81**(5):281. 3)Int J Hematol (Nov 2003) **78**(4):321.

**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) 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.

**PERFORMANCE:** Ficoll prepared human peripheral blood mononuclear cells (PBMC) were stimulated overnight in culture with 5 µg/ml PHA. Five x 10<sup>5</sup> cells per tube were washed and pre incubated 5 minutes with 20 µl of 250 µg/ml human IgG (to block non specific binding) after which they were incubated 45 minutes on ice with 80 ul of anti-human CD274/Biotin at concentration of **10 µg/ml**. They were then washed twice and incubated with 2<sup>o</sup> reagent Streptavidin/R-PE (Catalog #253-050) after which they were washed twice, fixed and analyzed by FACS using a lymphoid gate. Cells stained positive with a mean shift of **1.14 log<sub>10</sub>** fluorescent units when compared to an Isotype control Mouse IgG1/Biotin (catalog #278-010). Binding was blocked when reagent was pre incubated with a 10-fold excess of recombinant CD274-muIg (cat #541-020).

*\*Research use only. Not for use in Diagnostic procedures.*

**Binding of anti-CD274/Biotin +SA/PE to stimulated human PBMC**

