## PERFORMANCE DATA SHEET

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

mAb name/Clone: ANC6H1 *Isotype:* Mouse IgG1κ

Immunogen: Recombinant human CD274

CATALOG#: 274-020 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<sup>o</sup>C*. Freeze/Thawing is not recommended.

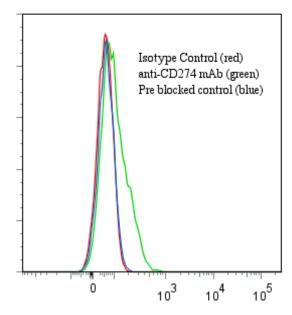
**PRODUCT STABILITY:** Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date:

**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: Ficoll prepared human peripheral blood mononuclear cells (PBMC) were stimulated overnight in culture with 5µg/ml PHA. Five x 10<sup>5</sup> cells per tube were washed and incubated 45 minutes on ice with 80 ul of anti-human CD274 antibody at concentration of 5 µg/ml. They were then washed twice and incubated with Goat-anti-Mouse/FITC (Cat# 232-011), after which they were washed twice, fixed and analyzed by FACS using a lymphoid gate. Cells stained positive with a mean shift of **0.33** log10 fluorescent units when compared to isotype control Mouse IgG1 antibody (catalog #278-010). Binding was blocked when reagent was pre incubated with a 10-fold excess of recombinant CD274muIg (cat# 541-020).

## Binding of anti-CD274(B7-H1) mAb + GAM/FITC to stimulated human PBMC



<sup>\*</sup> Research Use Only. Not for use in Diagnostic procedures.