

PERFORMANCE DATA SHEET

3032

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% NaN₃ (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 10⁵ 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^o 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 log₁₀ fluorescent units when compared to an Isotype control Mouse IgG1/Biotin (catalog #278-030). 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

