PERFORMANCE DATA SHEET

2011

Ancell

Monoclonal anti-human CD274 (B7-H1, PD-L1)/R-PE*

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

Immunogen: Recombinant human CD274

CATALOG#: 274-050 QUANTITY: 120 tests

VOLUME IN VIAL: 0.2 ml

WORKING DILUTION: 1:50 (or use 1.6µl of concentrated stock per 5 x 10⁵-cell test)

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. Do not freeze! Protect from light.

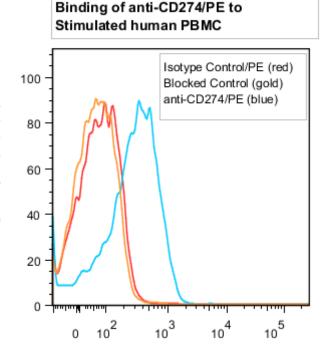
PRODUCT STABILITY: Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date:______

BUFFER: 50 mM Sodium Phosphate pH 7.5, 500 mM Potassium Chloride, 150mM NaCl, 15% Glycerol, 0.2% BSA, 0.04% NaN₃ (as a preservative).

PRODUCTION: Protein A purified antibody from tissue culture supernatant was conjugated to R-Phycoerythrin through a sulfo-ester linkage. Unconjugated antibody was removed using size exclusion chromatography. Antibody conjugate is at 1 mg/ml with an A_{565}/A_{280} ratio of 3.04.

PERFORMANCE: Ficoll prepared human peripheral blood mononuclear cells (PBMC) were stimulated overnight in culture with 5 μg/ml PHA. Five x 10^5 cells per tube were washed and pre incubated 5 minutes with 20μl of 250μg/ml human IgG (to block non specific binding), after which they were incubated 45 minutes on ice with 80 μl of anti-human CD274 at a dilution factor of **1:50** (20 μg/ml). They were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of **0.67** log₁₀ fluorescent units when compared to a Mouse IgG1/R-PE negative control (Catalog #278-050) at a similar concentration. Binding was blocked when cells were pre incubated 10 minutes with 20 μl of 0.5 mg/ml anti-CD274 antibody (Catalog #274-020).

*This Product is intended for Laboratory Research use only. R-Phycoerythrin (R-PE) is covered under patents: U.S. 4,520,110; European 76,695 and Canadian 1,179,942.



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