

1P-177-T100

## Monoclonal Antibody to CD274 / PD-L1 Phycoerythrin (PE) conjugated (100 tests)

**Clone:** 29E.2A3

**Isotype:** Mouse IgG2b

Specificity: The mouse monoclonal antibody 29E.2A3 recognizes CD274 / PD-L1 (also known

as B7-H1), a 40 kDa type I transmembrane protein expressed by dendritic cells, activated T cells, activated monocytes, and in various tissues, above all in heart and skeletal muscle, placenta and lung, and in many cancer cells, including T cell

lymphomas, melanomas, and glioblastomas.

Regulatory Status: RUO

**Immunogen:** Full length human CD274

Species Reactivity: Human, Non-Human Primates

**Preparation:** The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum

conditions. The conjugate is purified by size-exclusion chromatography and

adjusted for direct use. No reconstitution is necessary.

Storage Buffer: The reagent is provided in stabilizing phosphate buffered saline (PBS) solution

containing 15mM sodium azide.

**Storage / Stability:** Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not

use after expiration date stamped on vial label.

Usage: The reagent is designed for Flow Cytometry analysis of human blood cells using

10 µl reagent / 100 µl of whole blood or 10<sup>6</sup> cells in a suspension.

The content of a vial (1 ml) is sufficient for 100 tests.

**Expiration:** See vial label

Lot Number: See vial label

Background: CD274 / PD-L1 (programmed death ligand-1), also known as B7-H1, is a member

of the B7 family of regulatory proteins. It can act as both costimulatory and coinhibitory molecule for T cells. Interaction with its ligand CD279 (PD1) appears to be important in the maintenance of peripheral tolerance and in prevention of tumor rejection. Even pathogens (e.g. Schistosoma) may exploit CD274 to evade an immune response. Besides CD279, existence of other receptor(s) for CD274 is

likely.



## PRODUCT DATA SHEET

## References:

\*Butte MJ, Peña-Cruz V, Kim MJ, Freeman GJ, Sharpe AH: Interaction of human PD-L1 and B7-1. Mol Immunol. 2008 Aug;45(13):3567-72.

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\*Haile ST, Dalal SP, Clements V, Tamada K, Ostrand-Rosenberg S: Soluble CD80 restores T cell activation and overcomes tumor cell programmed death ligand 1-mediated immune suppression. J Immunol. 2013 Sep 1;191(5):2829-36.

\*Green MR, Monti S, Rodig SJ, Juszczynski P, Currie T, O'Donnell E, Chapuy B, Takeyama K, Neuberg D, Golub TR, Kutok JL, Shipp MA: Integrative analysis reveals selective 9p24.1 amplification, increased PD-1 ligand expression, and further induction via JAK2 in nodular sclerosing Hodgkin lymphoma and primary mediastinal large B-cell lymphoma. Blood. 2010 Oct 28;116(17):3268-77.

\*Rodríguez-García M, Porichis F, de Jong OG, Levi K, Diefenbach TJ, Lifson JD, Freeman GJ, Walker BD, Kaufmann DE, Kavanagh DG: Expression of PD-L1 and PD-L2 on human macrophages is up-regulated by HIV-1 and differentially modulated by IL-10. J Leukoc Biol. 2011 Apr;89(4):507-15.

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