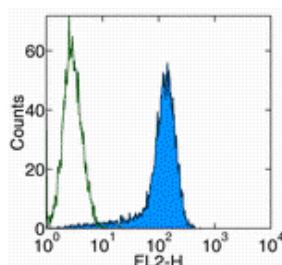


## Anti-Mouse CD273 (B7-DC) Purified

Catalog Number: 14-5986

Also Known As: B7DC, PD-L2, PDL-2, PDL2

RUO: For Research Use Only



Staining of B7-DC transfected cells with Anti-Mouse CD273 (B7-DC) PE. Appropriate isotype controls were used (open histogram). Total viable cells were used for analysis.

### Product Information

**Contents:** Anti-Mouse CD273 (B7-DC) Purified

**REF** **Catalog Number:** 14-5986

**Clone:** TY25

**Concentration:** 0.5 mg/mL

**Host/Isotype:** Rat IgG2a, kappa

**Formulation:** aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer



**Temperature Limitation:** Store at 2-8°C.



**Batch Code:** Refer to Vial



**Use By:** Refer to Vial



**Caution, contains Azide**

### Description

The TY25 monoclonal antibody reacts with mouse B7-DC/PD-L2. B7-DC, a member of the B7 family, has a predicted molecular weight of ~25 kDa and belongs to the Ig superfamily. The mouse B7-DC has a short cytoplasmic tail (4aa). B7-DC is primarily expressed by sub-populations of dendritic cells, monocytes and macrophages. Although B7-DC has structural and sequence similarities to the B7 family, it does not bind CD28/CTLA-4, but binds PD-1. The interactions between PD-1 and B7-DC/PD-L2 have been reported to be involved in costimulation or suppression of T cell proliferation depending on state of cellular activation. TY25 is a useful tool to study the exact function of B7-DC/PD-L2 in APC/T cell interaction and to characterize the expression pattern of this molecule in mouse.

### Applications Reported

The TY25 antibody has been reported for use in flow cytometric analysis, immunoprecipitation, immunoblotting (WB), and immunohistochemical staining of frozen tissue sections. Immunoblotting should be carried out under non-reducing conditions. It has also been reported for inhibition of ligand binding. (Please use Functional Grade purified TY25, cat. 16-5986, in functional assays.)

### Applications Tested

The TY25 antibody has been tested by flow cytometric analysis of mouse splenocyte suspensions and B7-DC transfected cells. This can be used at less than or equal to 0.5 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

### References

Aramaki O, Shirasugi N, Takayama T, Shimazu M, Kitajima M, Ikeda Y, Azuma M, Okumura K, Yagita H, Niimi M. 2004. Programmed death-1-programmed death-L1 interaction is essential for induction of regulatory cells by intratracheal delivery of alloantigen. *Transplantation*. Jan 15;77(1):6-12.

Tseng SY, Otsuji M, et al. 2001. B7-DC, a new dendritic cell molecule with potent costimulatory properties for T cells. *J Exp Med* 193 (7): 839-46.

Carter L, Fouser L, et al. 2002. PD-1:PD-L inhibitory pathway affects both CD4(+) and CD8(+) T cells and is overcome by IL-2. *Eur J Immunol* 32(3): 634-43.

Latchman Y, Wood CR, et al. 2001. PD-L2 is a second ligand for PD-1 and inhibits T cell activation. *Nat Immunol* 2(3): 261-8.

Yamazaki T, Akiba H, et al. Expression of programmed death 1 ligands by murine T cells and APC. *J Immunol*. 2002 Nov 15;169 (10):5538-45.

Kanai T, Totsuka T, Uraushihara K, Makita S, Nakamura T, Koganei K, Fukushima T, Akiba H, Yagita H, Okumura K, Machida U, Iwai H, Azuma M, Chen L, Watanabe M. 2003. Blockade of B7-H1 suppresses the development of chronic intestinal inflammation. *J Immunol.* 171(8):4156-63.

Mohammed Javeed I. Ansari, Alan D. Salama, Tanuja Chitnis, R. Neal Smith, Hideo Yagita, Hisaya Akiba, Tomohide Yamazaki, Miyuki Azuma, Hideyuki Iwai, Samia J. Khoury, Hugh Auchincloss, Jr. and Mohamed H. Sayegh. 2003. The Programmed Death-1 (PD-1) Pathway Regulates Autoimmune Diabetes in Nonobese Diabetic (NOD) Mice. *J Exp Med* 198 (1): 63-69.

Tanaka K., M. Albin et al. 2007. PDL1 is required for peripheral transplantation tolerance and protection from chronic allograft rejection. *J Immunol* 179(8):5204-5210. (FA, PubMed)

**Related Products**

11-4811 Anti-Rat IgG FITC

14-4321 Rat IgG2a K Isotype Control Purified

---

Not for further distribution without written consent.

Copyright © 2000-2010 eBioscience, Inc.

Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • [www.eBioscience.com](http://www.eBioscience.com) • [info@eBioscience.com](mailto:info@eBioscience.com)