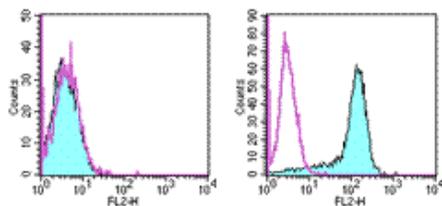


Anti-Mouse CD273 (B7-DC) PE

Catalog Number: 12-5986

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

RUO: For Research Use Only



Staining of non-transfected (left) and mouse B7-DC-transfected (right) cells with 0.25 ug of Rat IgG2a kappa Isotype Control PE (cat. 12-4321) (open histogram) or 0.06 ug of Anti-Mouse CD273 (B7-DC) PE (filled histogram). Total viable cells were used for analysis.

Product Information

Contents: Anti-Mouse CD273 (B7-DC) PE

REF **Catalog Number:** 12-5986

Clone: TY25

Concentration: 0.2 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. Do not freeze. Light sensitive material.

LOT **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.

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 10⁵ to 10⁸ 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

11-9972 Anti-Mouse CD273 (B7-DC) FITC (122)

12-4321 Rat IgG2a K Isotype Control PE

12-9972 Anti-Mouse CD273 (B7-DC) PE (122)

13-9972 Anti-Mouse CD273 (B7-DC) Biotin (122)

14-9972 Anti-Mouse CD273 (B7-DC) Purified (122)

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