

PE anti-mouse CD273 (B7-DC, PD-L2) Antibody

Catalog# / Size	107205 / 50 µg 107206 / 200 µg
Clone	TY25
Other Names	PD-L2, PDL2, B7DC, CD273
Isotype	Rat IgG2a, κ
Description	B7-DC is also called programmed death ligand 2 (PDL2). It has recently been clustered as CD273. This ligand is a 42 kD member of the immunoglobulin receptor superfamily expressed on a subset of dendritic cells, liver and a small subset of macrophages as well as a few transformed cell lines. CD273 has been reported to be stimulatory on dendritic cells when cross-linked and to inhibit T cell activation upon engaging the PD-1 receptor. CD273 has also been reported to bind to an alternative receptor and to mediate T cell activation through such non-PD1 mediated interactions. The TY25 antibody has been reported to be useful for blocking PD-1 mediated interactions.

Product Details

Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Mouse B7-DC transfected cell line
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions.
Concentration	0.2 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is ≤1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	Additional reported applications (for the relevant formats) include: immunoprecipitation ¹ , Western blotting ^{1,6} , blocking ^{2,4,5} of PD-1 mediated interactions, and immunohistochemistry of acetone-fixed frozen sections ³ . The Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. Nos. 107221-107226).
Application References	<ol style="list-style-type: none"> 1. Yamazaki T, et al. 2002. J. Immunol. 169:5538. (FC, IP, WB) 2. Ansari MJ, et al. 2003. J. Exp. Med. 198:63. (Block) 3. Salama AD, et al. 2003. J. Exp. Med. 198:71. (IHC) 4. Matsumoto K, et al. 2004. J. Immunol. 172:2530. (FC, Block) 5. Yamazaki T, et al. 2005. J. Immunol. 175:1586. (Block) 6. Meng Q, et al. 2006. Invest Ophthalmol Vis Sci. 47:444. (WB) PubMed 7. del Rio ML, et al. 2011. Transpl. Int. 24:501. (FC) PubMed 8. Murakami R, et al. 2013. PLoS One. 8:73270. PubMed
Product Citations	<ol style="list-style-type: none"> 1. Jelinek D, et al. 2014. J Immunol. 192:3548. PubMed 2. Ochiai S, et al. 2014. J Immunol. 193:2504. PubMed 3. Montero-Barrera D, et al. 2015. BioMed Res Int. 2015 615865. PubMed 4. Nakagawa Y, et al. 2015. Immunol Lett. 167: 72-86. PubMed 5. Pizzolla A, et al. 2016. PLoS One. 11: 0160407. PubMed 6. Sebina I, et al. 2016. PLoS Pathog. 12:e1005999. PubMed 7. Lakins MA, et al. 2018. Nat Commun. 9:948. PubMed 8. Abbott RK, et al. 2018. Immunity. 48:133. PubMed

9. Knox T, et al. 2019. Sci Rep. 9:6136. PubMed
10. Aurélien Trompette et al. 2018. Immunity. 48(5):992-1005 . PubMed
11. Garo LP, et al. 2019. Cell Rep. 28:3353. PubMed
12. Gundra UM, et al. 2017. Nat Immunol. 1.195833333. PubMed

RRID AB_2299418 (BioLegend Cat. No. 107205)
 AB_2162011 (BioLegend Cat. No. 107206)

Antigen Details

Structure	B7 Immunoglobulin superfamily, 42 kD
Distribution	Dendritic cells, liver, few transformed cell lines, subset of macrophages; not expressed on lymphoid tissues
Function	Binds to PD-1 and alternative receptor; ligation on DC stimulates, inhibits T cell responses via PD-1 binding, stimulates T cells via alternative receptor binding and promotes tumor immunity
Ligand/Receptor	PD-1, uncharacterized receptor
Cell Type	Dendritic cells, Macrophages
Biology Area	Costimulatory Molecules, Immunology
Molecular Family	CD Molecules, Immune Checkpoint Receptors
Antigen References	<ol style="list-style-type: none"> 1. Shin T, et al. 2003. J. Exp. Med. 198:31. 2. Liu X, et al. 2003. J. Exp. Med. 197:1721. 3. Carreno BM, et al. 2002. Annu. Rev. Immunol. 20:29.
Gene ID	58205

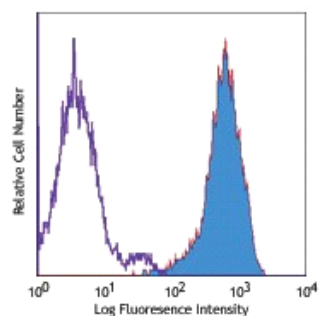
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-mouse CD273 (B7-DC, PD-L2), Biotin anti-mouse CD273 (B7-DC, PD-L2), APC anti-mouse CD273 (B7-DC, PD-L2), Brilliant Violet 421™ anti-mouse CD273 (B7-DC, PD-L2), PE/Cyanine7 anti-mouse CD273 (B7-DC, PD-L2), PerCP/Cyanine5.5 anti-mouse CD273 (B7-DC, PD-L2), PE/Dazzle™ 594 anti-mouse CD273 (B7-DC, PD-L2), Ultra-LEAF™ Purified anti-mouse CD273 (B7-DC, PD-L2), TotalSeq™-A0914 anti-mouse CD273 (B7-DC, PD-L2), TotalSeq™-C0914 anti-mouse CD273 (B7-DC, PD-L2)

Product Data



mB7-DC transfected cells stained with TY25 PE

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