

TECHNICAL DATA SHEET

PE-Cyanine7 Anti-Mouse CD274 (PD-L1, B7-H1) (10F.9G2)

Catalog Number: 60-1243

PRODUCT INFORMATION

Contents: PE-Cyanine7 Anti-Mouse CD274 (PD-L1, B7-H1)

Isotype: Rat IgG2b, kappa

Concentration: 0.2 mg/mL

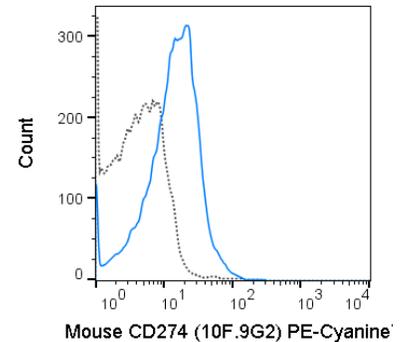
Clone: 10F.9G2

Reactivity: Mouse

Use By: 6 months from date of receipt

Storage Conditions: 2-8°C protected from light

Formulation: 10 mM NaH₂PO₄, 150 mM NaCl, 0.09% NaN₃,
0.1% gelatin, pH7.2



C57Bl/6 splenocytes were stained with 0.5 ug PE-Cyanine7 Anti-Mouse CD274 (60-1243) (solid line) or 0.5 ug PE-Cyanine7 Rat IgG2b isotype control (dashed line).

DESCRIPTION

The 10F.9G2 antibody is specific for mouse CD274, more commonly known as PD-L1 or B7-H1, which acts as a ligand for the T cell co-regulatory receptor PD-1 (CD279). This interaction modulates T cell antigen receptor (TCR) signaling and therefore T cell activation. PD-L1 binding to PD-1 expressed on CD4- CD8- thymocytes participates in the processes of clonal selection, elimination of autoreactive lymphocytes, and development of tolerance. PD-L1 may also bind PD-1 following the receptor's inducible expression on activated, mature T cells, where it has been proposed to limit T cell activation. PD-L1 is one of a group of "B7" ligands whose interactions with the CD28 receptor family, also including CTLA-4 (CD152), provide a balance of co-stimulatory /co-inhibitory signaling important in T cell activation, tolerance, and autoimmunity. The 10F.9G2 antibody may be used as a marker for PD-L1 expression on T and B cells, NK cells and on dendritic cells. It is also widely used for analysis of receptor-ligand interaction and function(s) in vitro and in vivo.

PREPARATION & STORAGE

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

APPLICATION NOTES

This antibody preparation has been quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). Please refer to the figure legend for the optimal concentration used to stain the tissue shown. We recommend titrating the antibody under your specific conditions to determine the optimal concentration of antibody needed in your experimental system.

REFERENCES

Chen A, Ahlen G, Brenndorfer ED, Brass A, Holmstrom F, Chen M, Soderholm J, Milich DR, Frelin L, and Sallberg M. 2011. *J. Immunol.* 186:5107-5118. (in vivo depletion) Zhang L, Gajewski TF, and Kline J. 2009. *Blood.* 114:1545-1552. (in vivo blocking) Rivas MN, Weatherly K, Hazzan M, Vokaer B, Dremier S, Gaudray F, Goldman M, Salmon I, and Braun MY. 2009. 183:4284-4291. (in vitro blocking) Brooks DG, Ha S-J, Elsaesser H, Sharpe AH, Freeman GJ, and Oldstone MBA. 2008. *Proc. Natl. Acad. Sci.* 105:20428-20433. (in vivo blocking) Koehn BH, Ford ML, Ferrer IR, Borom K, Gangappa S, Kirk AD, and Larsen CP. 2008. *J. Immunol.* 181:5313-5322. (in vivo blocking)

Tonbo Biosciences tests all antibodies by flow cytometry. Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

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