

TECHNICAL DATA SHEET

violetFluor™ 450 Anti-Mouse CD279 (PD-1) (RMP1-30)

Catalog Number: 75-9981

PRODUCT INFORMATION

Contents: violetFluor™ 450 Anti-Mouse CD279 (PD-1) (RMP1-30)

Isotype: Rat IgG2b, kappa

Concentration: 0.2 mg/mL

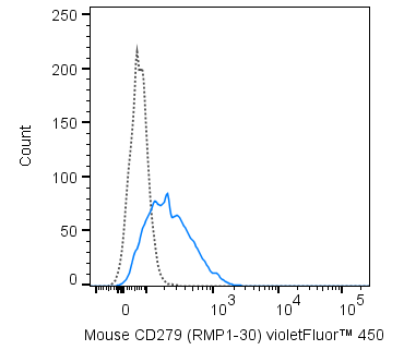
Clone: RMP1-30

Reactivity: Mouse

Use By: 12 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 stimulated with ConA and then stained with 0.5 µg violetFluor™ 450 Anti-Mouse CD279 (PD-1) (75-9981) (solid line) or 0.5 µg violetFluor™ 450 Rat IgG2b isotype control (dashed line).

DESCRIPTION

The RMP1-30 antibody is specific for mouse CD279, also known as programmed death-1 (PD-1), a 55 kDa glycoprotein member of the Ig superfamily of molecules. PD-1 exists in a monomeric form that is expressed by CD4⁺ CD8⁻ thymocytes, where it participates in the processes of clonal selection, elimination of autoreactive lymphocytes, and development of tolerance. PD-1 expression is also inducible upon activation of mature T cells, where it has been proposed to interact with the co-stimulatory receptor CD80 to limit T cell activation. Two ligands for PD-1, known as PD-L1 (B7-H1) and PD-L2 (B7-DC) are differentially expressed on T and B cells, monocytes, macrophages, NK cells or dendritic cells.

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.

violetFluor™ 450 dye is excited by the violet (405 nm) laser and has a peak emission of 450 nm. The most common band pass filters for this dye are 440/40 or 450/50. violetFluor™ 450 can be used as an alternative for Pacific Blue®, BD Horizon™ V450 or eFluor® 450.

REFERENCES

Ishida Y, Agata Y, Shibahara K, Honjo T. 1992. EMBO J. Nov 11(11):3887-3895. Carreno BM, Collins M. 2002. Annu Rev Immunol. 20:29-53. Matsumoto K, Inoue H, Nakano T, Tsuda M, Yoshiura Y, Fukuyama S, Tsushima F, Hoshino T, Aizawa H, Akiba H, Pardoll D, Hara N, Yagita H, Azuma M, Nakanishi Y. 2004. J Immunol. Feb 15;172(4):2530-2541.

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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