full spectrum cell analysis®
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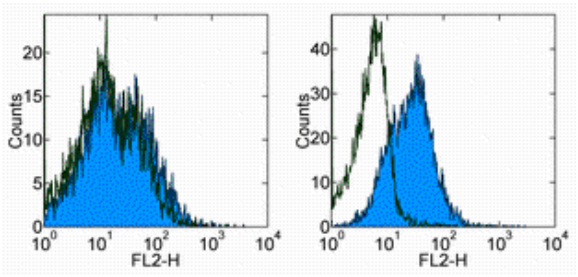
Anti-Mouse CD279 (PD-1) Purified

Catalog Number: 14-9981
Also Known As: Pdcd1, Programmed cell death protein 1
RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of 3-day unstimulated (left) and 3-day ConA activated (right) BALB/c splenocytes with 0.25 ug of Purified Rat IgG2b Isotype Control (cat. 14-4031) (open histogram) or 0.25 ug of Anti-Mouse CD279 (PD-1) Purified (filled histogram) followed by Anti-Rat IgG Biotin (cat. 13-4813)and Streptavidin PE (cat. 12-4317). Total viable cells were used for analysis.

Product Information

Contents: Anti-Mouse CD279 (PD-1) Purified
REF **Catalog Number:** 14-9981
Clone: RMP1-30
Concentration: 0.5 mg/mL
Host/Isotype: Rat IgG2b, kappa

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C.
LOT **Batch Code:** Refer to Vial
Use By: Refer to Vial
Contains sodium azide

Description

The RMP1-30 antibody reacts with mouse PD-1 (programmed death-1), a 55 kDa member of the Ig superfamily. PD-1 contains the immunoreceptor tyrosine-based inhibitory motif (ITIM) and plays a key role in peripheral tolerance and autoimmune disease in mice. PD-1 is expressed mainly on activated T and B lymphocytes. Two novel B7 Family members have been identified as PD-1 ligands, PD-L1 (B7-H1) and PD-L2 (B7-DC). Evidence reported to date suggests overlapping functions for these ligands and their constitutive expression on some normal tissues and upregulation on activated antigen-presenting cells. RMP1–30 does not block the binding of either B7-H1-Ig or B7-DC-Ig to PD-1 transfectants.

Applications Reported

The RMP1-30 antibody has been reported for use in flow cytometric analysis.

Applications Tested

The RMP1-30 antibody has been tested by flow cytometric analysis of mouse ConA-activated spleen cell suspensions. 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 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

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. B7-DC regulates asthmatic response by an IFN-gamma-dependent mechanism. J Immunol. J Immunol. 2004 Feb 15;172(4):2530-41.

Nishimura H, Okazaki T, Tanaka Y, Nakatani K, Hara M, Matsumori A, Sasayama S, Mizoguchi A, Hiai H, Minato N, Honjo T. Autoimmune dilated cardiomyopathy in PD-1 receptor-deficient mice. Science. 2001 Jan 12;291(5502):319-22.

Freeman GJ, Long AJ, Iwai Y, Bourque K, Chernova T, Nishimura H, Fitz LJ, Malenkovich N, Okazaki T, Byrne MC, Horton HF, Fouser L, Carter L, Ling V, Bowman MR, Carreno BM, Collins M, Wood CR, Honjo T. Engagement of the PD-1 immunoinhibitory receptor by a novel B7 family member leads to negative regulation of lymphocyte activation.J Exp Med. 2000 Oct 2;192(7):1027-34.

Agata Y, Kawasaki A, Nishimura H, Ishida Y, Tsubata T, Yagita H, Honjo T. Expression of the PD-1 antigen on the surface of stimulated mouse T and B lymphocytes.Int Immunol. 1996 May;8(5):765-72.

Related Products

11-4811 Anti-Rat IgG FITC

13-4813 Anti-Rat IgG Biotin (Polyclonal)
14-4031 Rat IgG2b K Isotype Control Purified

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