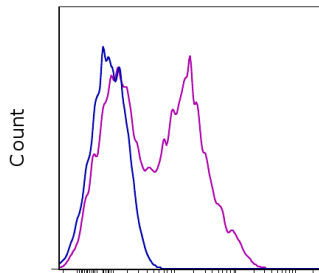


Anti-Mouse CD279 (PD-1) PerCP-eFluor[®] 710

Catalog Number: 46-9985

RUO: For Research Use Only. Not for use in diagnostic procedures.



CD279 (PD-1) PerCP-eFluor 710

Staining of 3-day Anti-Mouse CD3 and Anti-Mouse CD28 Functional Grade Purified (cat. 16-0031 and 16-0281)-stimulated C57Bl/6 splenocytes with 0.06 ug of Armenian Hamster IgG Isotype Control PerCP-eFluor[®] 710 (cat. 46-4888) (blue histogram) or 0.06 ug of Anti-Mouse CD279 (PD-1) PerCP-eFluor[®] 710 (purple histogram). Total viable cells, as determined by Fixable Viability Dye eFluor[®] 450 (cat. 65-0863), were used for analysis.

Product Information

Contents: Anti-Mouse CD279 (PD-1) PerCP-eFluor[®] 710



Catalog Number: 46-9985

Clone: J43

Concentration: 0.2 mg/mL

Host/Isotype: Armenian Hamster IgG

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.

Batch Code: Refer to vial

Use By: Refer to vial

Contains sodium azide



Description

The J43 monoclonal 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. It is reported that J43 inhibits the binding of mouse PD-L1-Ig and mouse PD-L2-Ig to PD-1/BHK transfected cells. When administered in vivo, both intact and Fab of J43 are reported to enhance contact hypersensitivity and exacerbate acute GVHD similar to transfer of PD-1-deficient cells. Injection of J43 also exacerbates EAE and NOD diabetes as do specific antibodies to mouse PD-L1 and PD-L2.

Applications Reported

This J43 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This J43 antibody has been tested by flow cytometric analysis of stimulated mouse splenocytes. This can be used at less than or equal to 0.125 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.

PerCP-eFluor[®] 710 can be used in place of PE-Cy5, PE-Cy5.5 or PerCP-Cy5.5. PerCP-eFluor[®] 710 emits at 710 nm and is excited with the blue laser (488 nm). Please make sure that your instrument is capable of detecting this fluorochrome. For a filter configuration, we recommend using the 685 LP dichroic mirror and 710/40 band pass filter, however the 695/40 band pass filter is an acceptable alternative.

Our testing indicates that PerCP-eFluor[®] 710 conjugated antibodies are stable when stained samples are exposed to freshly prepared 2% formaldehyde overnight at 4°C, but please evaluate for alternative fixation protocols.

Click here or contact eBioscience Technical Support for more information on eFluor[™] Organic Dyes including PerCP-

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eFluor® 710.

References

Ansari MJ, Salama AD, Chitnis T, Smith RN, Yagita H, Akiba H, Yamazaki T, Azuma M, Iwai H, Khoury SJ, Auchincloss H Jr, Sayegh MH. The programmed death-1 (PD-1) pathway regulates autoimmune diabetes in nonobese diabetic (NOD) mice. *J Exp Med.* 2003 Jul 7;198(1):63-9 (IH/F, FA, PubMed).

Salama AD, Chitnis T, Imitola J, Ansari MJ, Akiba H, Tushima F, Azuma M, Yagita H, Sayegh MH, Khoury SJ. Critical role of the programmed death-1 (PD-1) pathway in regulation of experimental autoimmune encephalomyelitis. *J Exp Med.* 2003 Jul 7;198(1):71-8. (IH/F, FA, PubMed)

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.

Nishimura H, Agata Y, Kawasaki A, Sato M, Imamura S, Minato N, Yagita H, Nakano T, Honjo T. Developmentally regulated expression of the PD-1 protein on the surface of double-negative (CD4-CD8-) thymocytes. *Int Immunol.* 1996 May;8(5):773-80.

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

12-9949 Anti-Mouse/Rat CD278 (ICOS) PE (C398.4A)

16-0031 Anti-Mouse CD3e Functional Grade Purified (145-2C11)

16-0281 Anti-Mouse CD28 Functional Grade Purified (37.51)

46-4888 Armenian Hamster IgG Isotype Control PerCP-eFluor® 710 (eBio299Arm)

65-0863 Fixable Viability Dye eFluor® 450

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