

CD279 (PD-1) Monoclonal Antibody (J43), PE-eFluor™ 610, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Armenian hamster / IgG
Recommended Isotype Control	Armenian Hamster IgG Isotype Control (eBio299Arm), PE-eFluor™ 610, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	J43
Conjugate	PE-eFluor™ 610
Excitation/Emission Max	565/606 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2574688

Applications	Tested Dilution	Publications
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Flow Cytometry (Flow)	1 µg/test	32 Publications
Functional Assay (FN)	-	1 Publication

Product Specific Information

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 administrated 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 1 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.

PE-eFluor® 610 can be excited with laser lines from 488-561 nm and emits at 607 nm. We recommend using a 610/20 band pass filter (equivalent to PE-Texas Red®). Please make sure that your instrument is capable of detecting this fluorochrome.

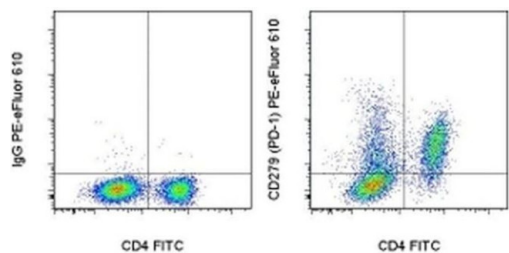
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency /compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 488-561 nm; Emission: 607 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD279 (PD-1) Monoclonal Antibody (J43), PE-eFluor™ 610, eBioscience™



CD279 (PD-1) Antibody (61-9985-82) in Flow
BALB/c splenocytes were stimulated for 3 days with plate-bound Anti-Mouse CD3e Functional Grade Purified (Product # 16-0031-82) and soluble Anti-Mouse CD28 Functional Grade Purified (Product # 16-0281-82). The cells were then stained with Anti-Mouse CD4 FITC (Product # 11-0041-82) and 0.5 µg of Armenian Hamster IgG Isotype Control PE-eFluor® 610 (Product # 61-4888-82) (left) or 0.5 µg of Anti-Mouse CD279 (PD-1) PE-eFluor® 610 (right). Viable cells in the lymphocyte gate, as determined by Fixable Viability Dye eFluor® 450 (Product # 65-0863-14), were used for analysis.

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Immunohistochemistry (Frozen) (1)

<p>The Journal of experimental medicine</p> <p>The programmed death-1 (PD-1) pathway regulates autoimmune diabetes in nonobese diabetic (NOD) mice.</p> <p>Authors: Ansari MJ,Salama AD,Chitnis T,Smith RN,Yagita H,Akiba H,Yamazaki T,Azuma M,Iwai H,Khoury SJ,Auchincloss H,Sayegh MH</p>	<p>Year 2003</p>
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Flow Cytometry (32)

<p>Nature communications</p> <p>PRDM1/BLIMP1 induces cancer immune evasion by modulating the USP22-SPI1-PD-L1 axis in hepatocellular carcinoma cells.</p> <p>"Published figure using CD279 (PD-1) monoclonal antibody (Product # 61-9985-82) in Flow Cytometry"</p> <p>Authors: Li Q,Zhang L,You W,Xu J,Dai J,Hua D,Zhang R,Yao F,Zhou S,Huang W,Dai Y,Zhang Y,Baheti T,Qian X,Pu L,Xu J,Xia Y,Zhang C,Tang J,Wang X</p>	<p>Year 2022</p>
<p>Aging and disease</p> <p>CD4⁺ CTLs Act as a Key Effector Population for Allograft Rejection of MSCs in a Donor MHC-II Dependent Manner in Injured Liver.</p> <p>"Published figure using CD279 (PD-1) monoclonal antibody (Product # 61-9985-82) in Flow Cytometry"</p> <p>Authors: Shen S,Li Y,Jin M,Fan D,Pan R,Lin A,Chen Y,Xiang L,Zhao RC,Shao J</p>	<p>Year 2022</p>

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Functional Assay (1)

<p>The Journal of experimental medicine</p> <p>The programmed death-1 (PD-1) pathway regulates autoimmune diabetes in nonobese diabetic (NOD) mice.</p> <p>Authors: Ansari MJ,Salama AD,Chitnis T,Smith RN,Yagita H,Akiba H,Yamazaki T,Azuma M,Iwai H,Khoury SJ,Auchincloss H,Sayegh MH</p>	<p>Year 2003</p>
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