

CD279 (PD-1) Monoclonal Antibody (J43), Super Bright™ 600, eBioscience™

Product Details	
Size	25 µg
Species Reactivity	Mouse
Host/Isotype	Armenian hamster / IgG
Recommended Isotype Control	Armenian Hamster IgG Isotype Control (eBio299Arm), Super Bright™ 600, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	J43
Conjugate	Super Bright™ 600
Excitation/Emission Max	414/601 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2762786

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 µg/test	23 Publications

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 may 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Super Bright 600 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 600 nm. We recommend using a 610/20 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright

Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

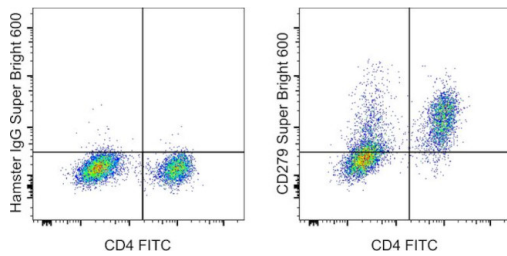
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222-49) (100 μ L of cell sample + 100 μ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-57) 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: 405 nm; Emission: 600 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For CD279 (PD-1) Monoclonal Antibody (J43), Super Bright™ 600, eBioscience™



CD279 (PD-1) Antibody (63-9985-80) in Flow

Swiss Webster mouse splenocytes were stimulated for 72 hours with CD3e and CD28 Monoclonal Antibodies, Functional Grade (Product # 16-0031-85 and Product # 16-0281-85) and then stained with CD4 Monoclonal Antibody, FITC (Product # 11-0042-82) and 0.25 μ g of Armenian Hamster IgG Isotype Control, Super Bright 600 (Product # 63-4888-82) (left) or 0.25 μ g of CD279 Monoclonal Antibody, Super Bright 600 (right). Cells in the lymphocyte gate were used for analysis.

[View more figures on thermofisher.com](#)

23 References

Flow Cytometry (23)

Nature communications

PRDM1/BLIMP1 induces cancer immune evasion by modulating the USP22-SPI1-PD-L1 axis in hepatocellular carcinoma cells.

"Published figure using CD279 (PD-1) monoclonal antibody (Product # 63-9985-82) in Flow Cytometry"

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

Year
2022

Aging and disease

CD4⁺ CTLs Act as a Key Effector Population for Allograft Rejection of MSCs in a Donor MHC-II Dependent Manner in Injured Liver.

"Published figure using CD279 (PD-1) monoclonal antibody (Product # 63-9985-82) in Flow Cytometry"

Authors: Shen S,Li Y,Jin M,Fan D,Pan R,Lin A,Chen Y,Xiang L,Zhao RC,Shao J

Year
2022

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