

# 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  |
| 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     | 16 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 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 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 10<sup>5</sup> to 10<sup>8</sup> 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.

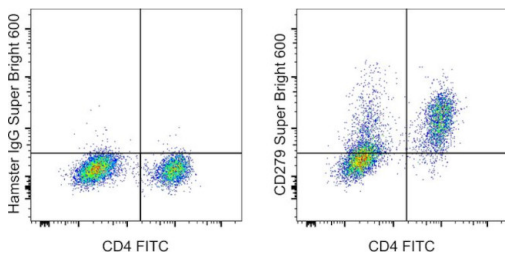
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222-49) (100  $\mu$ L of cell sample + 100  $\mu$ 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  $\mu$ g of Armenian Hamster IgG Isotype Control, Super Bright 600 (Product # 63-4888-82) (left) or 0.25  $\mu$ g of CD279 Monoclonal Antibody, Super Bright 600 (right). Cells in the lymphocyte gate were used for analysis.

[View more figures on thermofisher.com](https://www.thermofisher.com)

## 16 References

### Flow Cytometry (16)

Journal for immunotherapy of cancer

#### Ultrasound combined with nanobubbles promotes systemic anticancer immunity and augments anti-PD1 efficacy.

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

Authors: Hu J, He J, Wang Y, Zhao Y, Fang K, Dong Y, Chen Y, Zhang Y, Zhang C, Wang H, Tan J, Wang J, Zi R, Liu C, Liang H, Guo Y, Ou J

Year  
2022

The Journal of clinical investigation

#### CD153/CD30 signaling promotes age-dependent tertiary lymphoid tissue expansion and kidney injury.

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

Authors: Sato Y, Oguchi A, Fukushima Y, Masuda K, Toriu N, Taniguchi K, Yoshikawa T, Cui X, Kondo M, Hosoi T, Komidori S, Shimizu Y, Fujita H, Jiang L, Kong Y, Yamanashi T, Seita J, Yamamoto T, Toyokuni S, Hamazaki Y, Hattori M, Yoshikai Y, Boor P, Floege J, Kawamoto H, Murakawa Y, Minato N, Yanagita M

Year  
2022

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### More applications with references on thermofisher.com

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