

# CD279 (PD-1) Monoclonal Antibody (J43), Biotin, 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), Biotin, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	J43
Conjugate	Biotin
Form	Liquid
Concentration	0.5 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_467023

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	2 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Flow Cytometry (Flow)	0.25 µg/test	38 Publications
ELISA (ELISA)	-	1 Publication
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:** The J43 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** The J43 antibody has been tested by flow cytometric analysis of Con A-simulated mouse splenocytes and mouse PD-1 transfected cells. This can be used at less than or equal to 0.25 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.

Filtration: 0.2 µm post-manufacturing filtered.

43 References

Immunohistochemistry (2)

<p>Journal of Cancer</p> <p><b>PD-1 Blockade Overcomes Adaptive Immune Resistance in Treatment with Anchored-GM-CSF Bladder Cancer Cells Vaccine.</b></p> <p>"Published figure using CD279 (PD-1) monoclonal antibody (Product # 13-9985-82) in Immunohistochemistry"</p> <p>Authors: Zhang X,Shi X,Li J,Mo L,Hu Z,Gao J,Wu S,Long Z</p>	<p>Year</p> <p>2020</p>
<p>Gene therapy</p> <p><b>Effects of irradiating adult mdx mice before full-length dystrophin cDNA transfer on host anti-dystrophin immunity.</b></p> <p>"13-9985 was used in Immunohistochemistry to demonstrate that dystrophin gene transfer induces anti-dystrophin immunity that are diminished by temporal removal of host immune cells."</p> <p>Authors: Eghtesad S,Zheng H,Nakai H,Epperly MW,Clemens PR</p>	<p>Year</p> <p>2010</p> <p>Species</p> <p>Mouse</p>

Immunohistochemistry (Frozen) (1)

<p>The Journal of experimental medicine</p> <p><b>The programmed death-1 (PD-1) pathway regulates autoimmune diabetes in nonobese diabetic (NOD) mice.</b></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</p> <p>2003</p>
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Flow Cytometry (38)

<p>Nature communications</p> <p><b>PRDM1/BLIMP1 induces cancer immune evasion by modulating the USP22-SPI1-PD-L1 axis in hepatocellular carcinoma cells.</b></p> <p>"Published figure using CD279 (PD-1) monoclonal antibody (Product # 13-9985-82) 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</p> <p>2022</p>
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More applications with references on thermofisher.com

- ELISA (1)
- FN (1)

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