

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

Product Details	
Size	50 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotope	Armenian hamster / IgG
Class	Monoclonal
Type	Antibody
Clone	J43
Conjugate	Unconjugated
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
RRID	AB_468663

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 µg/test	31 Publications
Immunohistochemistry (Frozen) (IHC (F))	Assay-Dependent	1 Publication
Immunoprecipitation (IP)	Assay-Dependent	-
Functional Assay (FN)	-	3 Publications
Immunofluorescence (IF)	-	1 Publication
Neutralization (Neu)	-	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, and immunoprecipitation. It has also been reported for use in in vitro functional assays. (Please use Functional Grade purified J43, cat. 16-9985, in functional assays.).

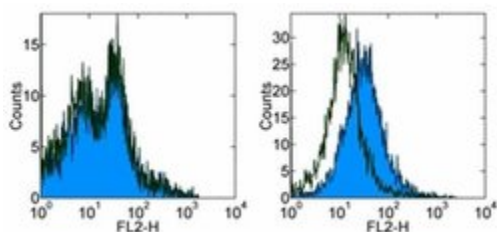
Applications Tested: The J43 antibody has been tested by flow cytometric analysis of mouse Con-A activated spleen cells and mouse PD-1 transfected cells. This can be used at less than or equal to 0.5 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final 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.

Purity: Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

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



CD279 (PD-1) Antibody (14-9985-81) in Flow

Staining of 3-day unstimulated (left) and 3-day ConA activated (right) BALB/c splenocytes with 0.25 µg of Hamster IgG Isotype Control Purified (Product # 14-4888-81) (open histogram) or 0.25 µg of Anti-Mouse PD-1 Purified (filled histogram) followed by Anti-Armenian Hamster IgG Biotin (Product # 13-4113-85) and Streptavidin PE (Product # 12-4317-87). Total viable cells were used for analysis.

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

Flow Cytometry (31)

Oncoimmunology

The stress kinase GCN2 does not mediate suppression of antitumor T cell responses by tryptophan catabolism in experimental melanomas.

"Published figure using CD279 (PD-1) monoclonal antibody (Product # 14-9985-82) in Flow Cytometry"

Authors: Sonner JK, Deumelandt K, Ott M, Thomé CM, Rauschenbach KJ, Schulz S, Munteanu B, Mohapatra S, Adam I, Hofer AC, Feuerer M, Opitz CA, Hopf C, Wick W, Platten M

Species
Not Applicable

Dilution
Not Cited

Year
2019

Oncoimmunology

Growth and metastasis of lung adenocarcinoma is potentiated by BMP4-mediated immunosuppression.

"Published figure using CD279 (PD-1) monoclonal antibody (Product # 14-9985-82) in Flow Cytometry"

Authors: Chen L, Yi X, Goswami S, Ahn YH, Roybal JD, Yang Y, Diao L, Peng D, Peng D, Fradette JJ, Wang J, Byers LA, Kurie JM, Ullrich SE, Qin FX, Gibbons DL

Species
Not Applicable

Dilution
Not Cited

Year
2019

[View more Flow references on thermofisher.com](#)

Functional Assay (3)

Nature communications

PD-L1hi B cells are critical regulators of humoral immunity.

"14-9985 was used in Functional assays to demonstrate that elevated PD-L1 expression on B cells is an important regulator of T follicular helper-cell activity, downstream antibody responses and autoimmune disease."

Authors: Khan AR, Hams E, Floudas A, Sparwasser T, Weaver CT, Fallon PG

Species
Mouse

Dilution
Not Cited

Year
2015

The Journal of experimental medicine

Programmed cell death 1 forms negative costimulatory microclusters that directly inhibit T cell receptor signaling by recruiting phosphatase SHP2.

"14-9985 was used in Western Blotting to investigate the molecular mechanisms of PD-1-mediated suppression of T cell activation, showing that it inhibits T cell receptor signalling via SHP2."

Authors: Yokosuka T, Takamatsu M, Kobayashi-Imanishi W, Hashimoto-Tane A, Azuma M, Saito T

Species
Mouse

Dilution
Not Cited

Year
2012

[View more FN references on thermofisher.com](#)

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Neu (1) IF (1) IHC (F) (1)

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