

CD279 (PD-1) Monoclonal Antibody (MIH4), Super Bright™ 645, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Super Bright™ 645, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	MIH4
Conjugate	Super Bright™ 645
Excitation/Emission Max	414/645 nm
Form	Liquid
Concentration	5 µL/Test
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_2717119

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (1.0 µg)/test	8 Publications

Product Specific Information

Description: The MIH4 monoclonal antibody reacts with the human PD-1 (programmed death-1), a 55 kDa member of the immunoglobulin superfamily. PD-1 contains the immunoreceptor tyrosine-based inhibitory motif (ITIM) and plays a key role in peripheral tolerance and autoimmune disease. PD-1 is expressed predominantly on activated T and B lymphocytes. Two novel members of the B7 family have been identified as the PD-1 ligands, PD-L1 (B7-H1) and PD-L2 (B7-DC). Evidence reported to date suggests overlapping functions for these two PD-1 ligands and their constitutive expression on some normal tissues and upregulation on activated antigen-presenting cells. The MIH4 antibody recognizes a different epitope than antibody clones J105.

Applications Reported: This MIH4 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This MIH4 antibody has been pre-diluted and tested by flow cytometric analysis of stimulated normal human peripheral blood cells. This may be used at 5 µL (1.0 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.

Super Bright 645 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 645 nm. We recommend using a 660/20 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.

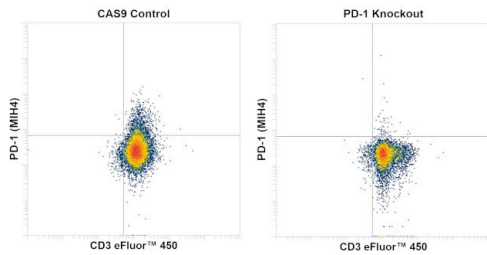
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 μ L of cell sample + 100 μ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 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: 405 nm; Emission: 645 nm; Laser: Violet Laser.

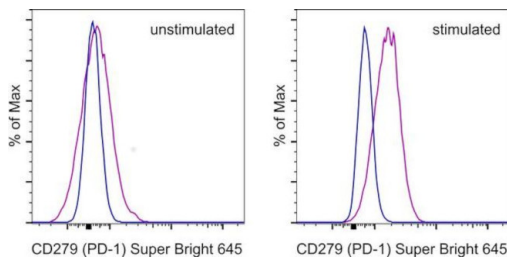
Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For CD279 (PD-1) Monoclonal Antibody (MIH4), Super Bright™ 645, eBioscience™



CD279 (PD-1) Antibody (64-9969-42)

Antibody clone (MIH4) specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. Loss of signal was observed for target protein in MIH4 KO cells (left) compared to the control Cas9 cells (right) using CD279 antibody (MIH4). {KO}



CD279 (PD-1) Antibody (64-9969-42) in Flow

Staining of unstimulated (left) or 3-day PHA-stimulated (right) normal human peripheral blood cells with Mouse IgG1 K Isotype Control Super Bright (Product # 64-4714) (blue histogram) or Anti-Human CD279 (PD-1) FITC (Product # 64-9969) (purple histogram). Total viable cells were used for analysis.

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

8 References

Flow Cytometry (8)

Cancer research communications

Reprogramming of Tumor-reactive Tumor-infiltrating Lymphocytes to Human-induced Pluripotent Stem Cells.

"Published figure using CD279 (PD-1) monoclonal antibody (Product # 64-9969-42) in Flow Cytometry"

Authors: Islam SMR, Maeda T, Tamaoki N, Good ML, Kishton RJ, Paria BC, Yu Z, Bosch-Marce M, Bedanova NM, Liu C, Kruhlak MJ, Restifo NP, Vizcardo R

Year
2023

Nature medicine

Neoadjuvant chemotherapy plus nivolumab with or without ipilimumab in operable non-small cell lung cancer: the phase 2 platform NEOSTAR trial.

"64-9969-42 was used in Flow cytometry/Cell sorting to report the results and correlates of two arms of the phase 2 platform NEOSTAR trial testing neoadjuvant Nivo+CT and Ipi+Nivo+CT with major pathologic response (MPR) as the primary endpoint."

Authors: Cascone T, Leung CH, Weissferdt A, Pataer A, Carter BW, Godoy MCB, Feldman H, William WN, Xi Y, Basu S, Sun JJ, Yadav SS, Rojas Alvarez FR, Lee Y, Mishra AK, Chen L, Pradhan M, Guo H, Sinjab A, Zhou N, Negro MV, Le X, Gay CM, Tsao AS, Byers LA, Altan M, Glisson BS, Fossella FV, Elamin YY, Blumenschein G, Zhang J, Skoulidis F, Wu J, Mehran RJ, Rice DC, Walsh GL, Hofstetter WL, Rajaram R, Antonoff MB, Fujimoto J, Solis LM, Parra ER, Haymaker C, Wistuba II, Swisher SG, Vaporciyan AA, Lin HY, Wang J, Gibbons DL, Jack Lee J, Ajami NJ, Wargo JA, Allison JP, Sharma P, Kadara H, Heymach JV, Sepesi B

Year
2023

Species
Human

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More applications with references on thermofisher.com

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