

# CD279 (PD-1) Monoclonal Antibody (eBioJ105 (J105)), Super Bright™ 645, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human, Rhesus monkey
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	eBioJ105 (J105)
Conjugate	Super Bright™ 645
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_2724084

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.25 µg)/test	2 Publications

## Product Specific Information

Description: The J105 monoclonal antibody reacts with the human PD-1 (programmed death-1), a 55 kDa member of the CD28 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.

Costaining experiments suggest that eBioJ105 recognizes a different epitope than MIH4 (cat. 11-9969).

Applications Reported: This eBioJ105 (J105) antibody has been reported for use in flow cytometric analysis.

Applications Tested: This eBioJ105 (J105) antibody has been pre-titrated and tested by flow cytometric analysis of PHA stimulated human peripheral blood cells. This can be used at 5 µL (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.

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.

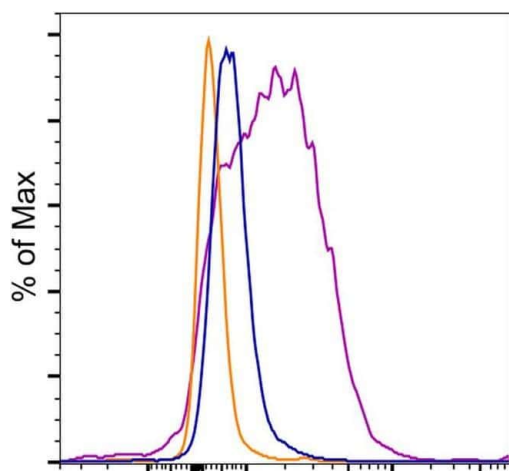
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100  $\mu$ L of cell sample + 100  $\mu$ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 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 (eBioJ105 (J105)), Super Bright™ 645, eBioscience™



### CD279 (PD-1) Antibody (64-2799-42) in Flow

Normal human peripheral blood cells were unstimulated (orange histogram) or stimulated with PHA-L (Product # 00-4977). Cells were then stained with Mouse IgG1 kappa Isotype Control, Super Bright 645 (Product # 64-4714-82) (blue histogram) or CD279 Monoclonal Antibody, Super Bright 645 (purple histogram). Cells in the lymphocyte gate were used for analysis.

CD279 Super Bright 645

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

## Flow Cytometry (2)

### Scientific reports

#### Ex vivo modelling of PD-1/PD-L1 immune checkpoint blockade under acute, chronic, and exhaustion-like conditions of T-cell stimulation.

Year  
2021

"Published figure using CD279 (PD-1) monoclonal antibody (Product # 64-2799-42) in Flow Cytometry"

Authors: Roberts A, Bentley L, Tang T, Stewart F, Pallini C, Juvvanapudi J, Wallace GR, Cooper AJ, Scott A, Thickett D, Lugg ST, Bancroft H, Hemming B, Ferris C, Langman G, Robinson A, Chapman J, Naidu B, Pinkney T, Taylor GS, Brock K, Stamataki Z, Brady CA, Curnow SJ, Gordon J, Qureshi O, Barnes NM

### JCI insight

#### Risk-associated alterations in marrow T cells in pediatric leukemia.

Year  
2020

"Published figure using CD279 (PD-1) monoclonal antibody (Product # 64-2799-42) in Flow Cytometry"

Authors: Bailur JK, McCachren SS, Pendleton K, Vasquez JC, Lim HS, Duffy A, Doxie DB, Kaushal A, Foster C, DeRyckere D, Castellino S, Kemp ML, Qiu P, Dhodapkar MV, Dhodapkar KM

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