

# CD274 (PD-L1, B7-H1) Monoclonal Antibody (MIH5), Super Bright™ 645, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2a, lambda
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Super Bright™ 645, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	MIH5
Conjugate	Super Bright™ 645
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_2688084

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	2 Publications
Flow Cytometry (Flow)	0.125 µg/test	12 Publications
Neutralization (Neu)	-	3 Publications
Functional Assay (FN)	-	1 Publication
Miscellaneous PubMed (Misc)	-	1 Publication

## Product Specific Information

Description: The MIH5 monoclonal antibody reacts with mouse B7-H1, also known as PD-L1. B7-H1, a member of the B7 family, has a predicted molecular weight of approximately 40 kDa and belongs to the Ig superfamily. B7-H1 is expressed on a majority of leukocytes including T, B, NK and DC. B7-H1 is a ligand for PD-1. Interaction of PD-1 with either PD-L1 (B7-H1) or PD-L2 (B7-DC) results in inhibition of T and B cell responses. MIH5 is reported to be a blocking antibody.

Applications Reported: This MIH5 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This MIH5 antibody has been tested by flow cytometric analysis of mouse splenocytes. This may be used at less than or equal to 0.125 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 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.

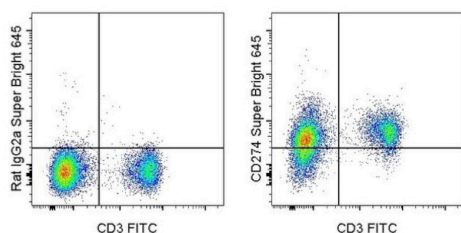
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100  $\mu$ L of cell sample + 100  $\mu$ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333) for up to 3 days in the dark at 4 degrees 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 CD274 (PD-L1, B7-H1) Monoclonal Antibody (MIH5), Super Bright™ 645, eBioscience™



### CD274 (PD-L1, B7-H1) Antibody (64-5982-82) in Flow

Staining of C57Bl/6 splenocytes with CD3e Monoclonal Antibody, FITC (Product # 11-0031) and 0.06  $\mu$ g of Rat IgG2a K Isotype Control, Super Bright 645 (Product # 64-4321) (left) or 0.06  $\mu$ g of Anti-Mouse CD274 (B7-H1) Super Bright 645 (right). Cells in the lymphocyte gate were used for analysis.

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

## 19 References

### Immunohistochemistry (2)

#### Molecular therapy oncolytics

##### **IFNAR blockade synergizes with oncolytic VSV to prevent virus-mediated PD-L1 expression and promote antitumor T cell activity.**

"Published figure using CD274 (PD-L1, B7-H1) monoclonal antibody (Product # 64-5982-82) in Immunohistochemistry"  
Authors: El-Sayes N,Walsh S,Vito A,Reihani A,Ask K,Wan Y,Mossman K

Year  
2022

#### mAbs

##### **Preclinical characterization of bemarituzumab, an anti-FGFR2b antibody for the treatment of cancer.**

"Published figure using CD274 (PD-L1, B7-H1) monoclonal antibody (Product # 64-5982-82) in Immunocytochemistry"  
Authors: Xiang H,Chan AG,Ahene A,Bellovin DI,Deng R,Hsu AW,Jeffrey U,Palencia S,Powers J,Zanghi J,Collins H

Year  
2022

### Flow Cytometry (12)

#### Theranostics

##### **Heterogeneity of tyrosine-based melanin anabolism regulates pulmonary and cerebral organotropic colonization microenvironment of melanoma cells.**

"Published figure using CD274 (PD-L1, B7-H1) monoclonal antibody (Product # 64-5982-82) in Flow Cytometry"  
Authors: Wang X,Chen Y,Lan B,Wang Y,Lin W,Jiang X,Ye J,Shang B,Feng C,Liu J,Zhai J,Xu M,Li Q,Lin L,Hu M,Zheng F,Chen L,Shao C,Wang Y,Shi Y

Year  
2022

#### Nature communications

##### **USP12 downregulation orchestrates a protumorigenic microenvironment and enhances lung tumour resistance to PD-1 blockade.**

"Published figure using CD274 (PD-L1, B7-H1) monoclonal antibody (Product # 64-5982-82) in Flow Cytometry"  
Authors: Yang Z,Xu G,Wang B,Liu Y,Zhang L,Jing T,Tang M,Xu X,Jiao K,Xiang L,Fu Y,Tang D,Zhang X,Jin W,Zhuang G,Zhao X,Liu Y

Year  
2021

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

### More applications with references on thermofisher.com

**Neu (3)** **FN (1)** **Misc (1)**

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