

# CD274 (PD-L1, B7-H1) Monoclonal Antibody (MIH5), Super Bright™ 780, 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™ 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	MIH5
Conjugate	Super Bright™ 780
Excitation/Emission Max	413/780 nm
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_2724081

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	4 Publications
Flow Cytometry (Flow)	0.06 µg/test	19 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 0.06 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 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Super Bright 780 can be excited with the violet laser line (405 nm) and emits at 780 nm. We recommend using a 780/60

bandpass filter, or equivalent. 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.

In some experiments, we have observed that compensation values for Super Bright 780-conjugated antibodies are higher in the violet 450/50 channel when using UltraComp eBeads microspheres (Product # 01-2222-42) as compared to single-color stained cells. In such circumstances, we would recommend setting compensation with cells. We have also observed this in some experiments using AbC Total Antibody Compensation beads (Product # A10497).

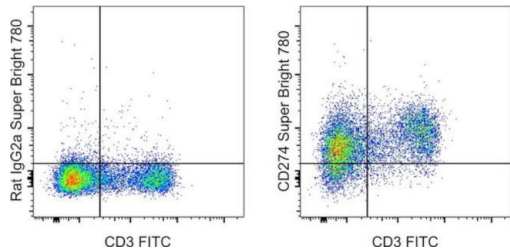
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 µL of cell sample + 100 µL 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: 780 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™ 780, eBioscience™**



**CD274 (PD-L1, B7-H1) Antibody (78-5982-82) in Flow**  
Staining of BALB/c splenocytes with CD3e Monoclonal Antibody, FITC (Product # 11-0031) and 0.03 µg of Rat IgG2a kappa Isotype Control, Super Bright 780 (Product # 78-4321) (left) or 0.03 µg of CD274 Monoclonal Antibody, Super Bright 780 (right). Cells in the lymphocyte gate were used for analysis.

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

## Immunohistochemistry (4)

Journal of translational medicine

### Scoring model based on the signature of non-m6A-related neoantigen-coding lncRNAs assists in immune microenvironment analysis and TCR-neoantigen pair selection in gliomas.

"Published figure using CD274 (PD-L1, B7-H1) monoclonal antibody (Product # 78-5982-82) in Immunohistochemistry"

Authors: Zhao W,Wu Y,Zhao F,Xue Z,Liu W,Cao Z,Zhao Z,Huang B,Han M,Li X

Year  
2022

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 # 78-5982-82) in Immunohistochemistry"

Authors: El-Sayes N,Walsh S,Vito A,Reihani A,Ask K,Wan Y,Mossman K

Year  
2022

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

## Flow Cytometry (19)

Cancers

### 5-Azacytidine-Mediated Modulation of the Immune Microenvironment in Murine Acute Myeloid Leukemia.

"Published figure using CD274 (PD-L1, B7-H1) monoclonal antibody (Product # 78-5982-82) in Flow Cytometry"

Authors: Ebelt ND,Manuel ER

Year  
2022

Cancer & metabolism

### Isotope tracing reveals distinct substrate preference in murine melanoma subtypes with differing anti-tumor immunity.

"Published figure using CD274 (PD-L1, B7-H1) monoclonal antibody (Product # 78-5982-82) in Flow Cytometry"

Authors: Zhang X,Halberstam AA,Zhu W,Leitner BP,Thakral D,Bosenberg MW,Perry RJ

Year  
2022

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

## More applications with references on thermofisher.com

Neu (3)   FN (1)   Misc (1)

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