

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
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)	-	2 Publications
Flow Cytometry (Flow)	0.06 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 0.06 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 10⁵ to 10⁸ 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).

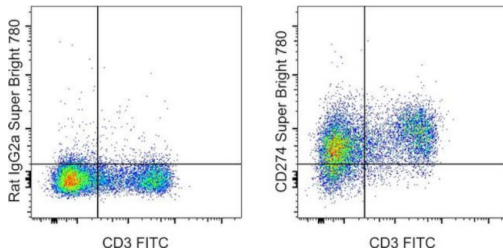
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 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: 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 μ g of Rat IgG2a kappa Isotype Control, Super Bright 780 (Product # 78-4321) (left) or 0.03 μ g of CD274 Monoclonal Antibody, Super Bright 780 (right). Cells in the lymphocyte gate were used for analysis.

[View more figures on thermofisher.com](https://www.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 # 78-5982-82) 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 # 78-5982-82) 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 # 78-5982-82) 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 # 78-5982-82) 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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