

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
Excitation/Emission Max	414/645 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_2688084

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	4 Publications
Flow Cytometry (Flow)	0.125 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 0.125 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 10⁵ to 10⁸ 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.

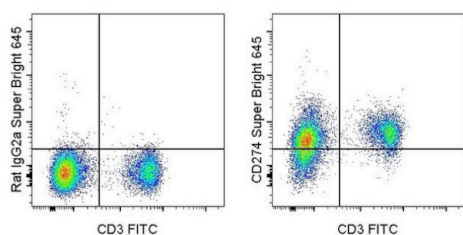
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 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 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 μ g of Rat IgG2a K Isotype Control, Super Bright 645 (Product # 64-4321) (left) or 0.06 μ 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](https://www.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 # 64-5982-82) 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 # 64-5982-82) 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.

"64-5982-82 was used in Flow cytometry/Cell sorting to find that 5-Aza treatment re-established immune-related transcript expression, suppressed leukemic burden and extended survival in leukemia-challenged mice."

Authors: Ebelt ND,Manuel ER

Year
2022

Species
Mouse

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 # 64-5982-82) 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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