

CD274 (PD-L1, B7-H1) Monoclonal Antibody (MIH5), Super Bright™ 600, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG2a, lambda
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Super Bright™ 600, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	MIH5
Conjugate	Super Bright™ 600
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_2688101

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	2 Publications
Flow Cytometry (Flow)	0.25 µg/test	11 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 0.25 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Super Bright 600 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 600 nm. We recommend

using a 610/20 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.

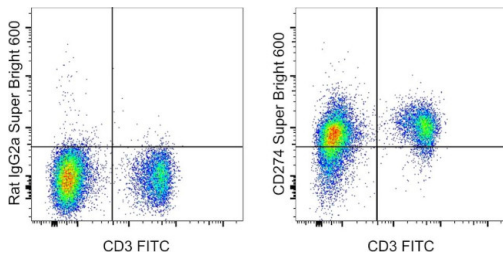
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

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: 600 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™ 600, eBioscience™



CD274 (PD-L1, B7-H1) Antibody (63-5982-82) in Flow

Staining of C57Bl/6 splenocytes with Anti-Mouse CD3e FITC (Product # 11-0031) and 0.125 μ g of Rat IgG2a K Isotype Control Super Bright 600 (Product # 63-4321) (left) or 0.125 μ g of Anti-Mouse CD274 (B7-H1) Super Bright 600 (right). Cells in the lymphocyte gate were used for analysis.

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

18 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 # 63-5982-82) 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 # 63-5982-82) 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 (11)

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 # 63-5982-82) 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 # 63-5982-82) 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)**

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.