

MHC Class II (I-A/I-E) Monoclonal Antibody (M5/114.15.2), Super Bright 780, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), Super Bright 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	M5/114.15.2
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_2744917

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Flow Cytometry (Flow)	0.25 µg/test	15 Publications
Immunoprecipitation (IP)	-	1 Publication

Product Specific Information

Description: The M5/114.15.2 monoclonal antibody reacts with the mouse major histocompatibility complex class II, both I-A and I-E subregion-encoded glycoproteins (I-A b, I-A d, I-A q, I-E d, I-E k, not I-A f, I-A k, or I-A s). It detects a polymorphic determinant present on B cells, monocytes, macrophages, dendritic cells, and activated T lymphocytes from mice carrying the H-2 b, H-2 d, H-2 q, H-2 p, H-2 r and H-2 u but not from mice carrying the H-2 s or H-2 f haplotypes. The M5/114 mAb is reported to inhibit I-A-restricted T cell responses of the H-2 b, H-2 d, H-2 q, H-2 u but not H-2 f, H-2 k, or H-2 s haplotypes.

Applications Reported: This M5/114.15.2 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This M5/114.15.2 antibody has been tested by flow cytometric analysis of stimulated 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 780 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 780 nm. We recommend using a 780/60 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.

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).

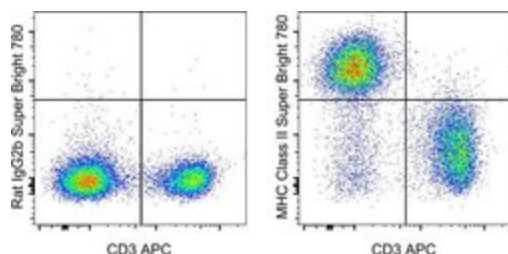
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

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 MHC Class II (I-A/I-E) Monoclonal Antibody (M5/114.15.2), Super Bright 780, eBioscience™



MHC Class II (I-A/I-E) Antibody (78-5321-82) in Flow

Swiss Webster mouse splenocytes were stained with CD3 Monoclonal Antibody, APC (Product # 17-0031-82) and 0.125 μ g of Rat IgG2b kappa Isotype Control, Super Bright 780 (Product # 78-4031-82) (left) or 0.125 μ g of MHC Class II (I-A/I-E) 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)

17 References

Western Blot (1)

Frontiers in cellular and infection microbiology

RON Expression Mediates Lipopolysaccharide-Mediated Dendritic Cell Maturation *via* March-I.

"Published figure using MHC Class II (I-A/I-E) monoclonal antibody (Product # 78-5321-82) in Immunoprecipitation"

Authors: Huang L,Fang X,Zhang X,Wu W,Yao H,Fang Q

Species
Not Applicable

Dilution
Not Cited

Year
2021

Flow Cytometry (15)

International journal of biological sciences

MiR-103 protects from recurrent spontaneous abortion via inhibiting STAT1 mediated M1 macrophage polarization.

"Published figure using MHC Class II (I-A/I-E) monoclonal antibody (Product # 78-5321-82) in Flow Cytometry"

Authors: Zhu X,Liu H,Zhang Z,Wei R,Zhou X,Wang Z,Zhao L,Guo Q,Zhang Y,Chu C,Wang L,Li X

Species
Not Applicable

Dilution
Not Cited

Year
2021

Frontiers in immunology

Dietary Glucose Consumption Promotes RALDH Activity in Small Intestinal CD103⁺CD11b⁺ Dendritic Cells.

"Published figure using MHC Class II (I-A/I-E) monoclonal antibody (Product # 78-5321-82) in Flow Cytometry"

Authors: Ko HJ,Hong SW,Verma R,Jung J, Lee M, Kim N, Kim D, Surh CD, Kim KS, Rudra D, Im SH

Species
Not Applicable

Dilution
Not Cited

Year
2021

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

Immunoprecipitation (1)

Frontiers in cellular and infection microbiology

RON Expression Mediates Lipopolysaccharide-Mediated Dendritic Cell Maturation *via* March-I.

"Published figure using MHC Class II (I-A/I-E) monoclonal antibody (Product # 78-5321-82) in Immunoprecipitation"

Authors: Huang L,Fang X,Zhang X,Wu W,Yao H,Fang Q

Species
Not Applicable

Dilution
Not Cited

Year
2021

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