

MHC Class II (I-A/I-E) Monoclonal Antibody (M5/114.15.2), Super Bright 645, 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 645, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	M5/114.15.2
Conjugate	Super Bright 645
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_2662402

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.125 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 mouse splenocytes. This can 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.

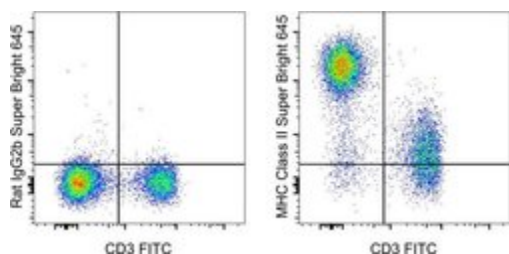
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 μ L of cell sample + 100 μ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 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: 645 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 645, eBioscience™



MHC Class II (I-A/I-E) Antibody (64-5321-82) in Flow

Staining of C57BL/6 splenocytes with Anti-Mouse CD3 FITC (Product # 11-0031-82) and Rat IgG2b K Isotype Control (Product # 64-4031-82) (left) or 0.06 μ g of Anti-Mouse MHC Class II (I-A/I-E) Super Bright 645 (right). Cells in the lymphocyte gate were used for analysis.

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

16 References

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 # 64-5321-82) 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 # 64-5321-82) 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-1.

"Published figure using MHC Class II (I-A/I-E) monoclonal antibody (Product # 64-5321-82) in Immunoprecipitation"

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

Species
Not Applicable

Dilution
Not Cited

Year
2021

More applications with references on thermofisher.com

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