

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

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse, Human
Host/Isotype	Rat / IgG2b, kappa
Class	Monoclonal
Type	Antibody
Clone	M5/114.15.2
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_467561

Applications	Tested Dilution	Publications
Western Blot (WB)	Assay-Dependent	1 Publication
Immunohistochemistry (IHC)	-	42 Publications
Immunohistochemistry (Paraffin) (IHC (P))	Assay-Dependent	-
Immunohistochemistry (Frozen) (IHC (F))	Assay-Dependent	6 Publications
Immunocytochemistry (ICC/IF)	-	9 Publications
Flow Cytometry (Flow)	0.125 µg/test	168 Publications
ELISA (ELISA)	-	1 Publication
Immunoprecipitation (IP)	Assay-Dependent	2 Publications
Neutralization (Neu)	Assay-Dependent	2 Publications
Functional Assay (FN)	Assay-Dependent	3 Publications
Inhibition Assays (IA)	-	3 Publications
Blocking Assay (BLOCK)	-	1 Publication
Miscellaneous PubMed (Misc)	-	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, immunoprecipitation, immunoblotting (WB), immunohistology staining of frozen tissue sections, immunohistology staining of paraffin embedded tissue sections and in vitro blocking of T cell proliferative responses. (Please use Functional Grade purified M5/114.15.2, cat.16-4321, in functional assays.)

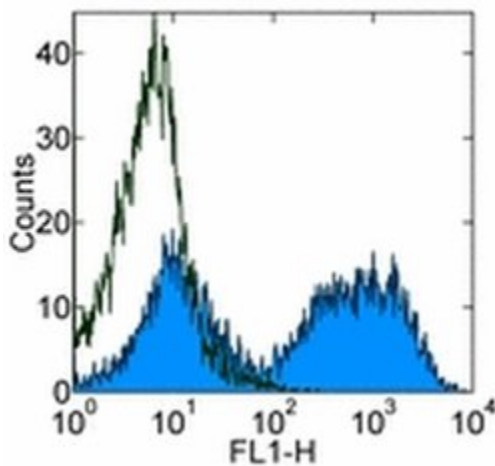
Applications Tested: The M5/114.15.2 antibody has been tested by flow cytometric analysis of mouse splenocytes and can be used at less than or equal to 0.125 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Purity: Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

## Product Images For MHC Class II (I-A/I-E) Monoclonal Antibody (M5/114.15.2), eBioscience™



### MHC Class II (I-A/I-E) Antibody (14-5321-82) in Flow

Staining of C57BL/6 splenocytes with 0.06 µg of Rat IgG2b K Isotype Control Purified (Product # 14-4031-82) (open histogram) or 0.06 µg of Anti-Mouse MHC Class II (I-A/I-E) Purified (filled histogram) followed by Anti-Rat IgG FITC (Product # 11-4811-85). Total viable cells were used for analysis.

[View more figures on thermofisher.com](#)

## 239 References

### Western Blot (1)

Cellular immunology

#### BCG vaccine mediated reduction in the MHC-II expression of macrophages and dendritic cells is reversed by activation of Toll-like receptors 7 and 9.

"Published figure using MHC Class II (I-A/I-E) monoclonal antibody (Product # 14-5321-82) in Flow Cytometry"

Authors: Bakhru P, Sirisaengtaksin N, Soudani E, Mukherjee S, Khan A, Jagannath C

Species  
Mouse

Dilution  
Not Cited

Year  
2014

### Immunohistochemistry (42)

Frontiers in neuroscience

## Reduction of the RNA Binding Protein TIA1 Exacerbates Neuroinflammation in Tauopathy.

"14-5321 was used in Immunohistochemistry to demonstrate that TIA1 plays an important role in the neuroimmune response to chronic stress in the form of tauopathy."

Authors: LeBlang CJ, Medalla M, Nicoletti NW, Hays EC, Zhao J, Shattuck J, Cruz AL, Wolozin B, Luebke JI

Species

Mouse

Dilution

1:250

Year

2021

Frontiers in aging neuroscience

## Age Influences Microglial Activation After Cuprizone-Induced Demyelination.

"Published figure using MHC Class II (I-A/I-E) monoclonal antibody (Product # 14-5321-82) in Immunofluorescence"

Authors: Klein B, Mrowetz H, Barker CM, Lange S, Rivera FJ, Aigner L

Species

Not Applicable

Dilution

Not Cited

Year

2020

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

## Immunohistochemistry (Frozen) (6)

PLoS pathogens

## Astrocytes promote a protective immune response to brain Toxoplasma gondii infection via IL-33-ST2 signaling.

"14-5321-81 was used in Immunohistochemistry (Frozen) to show that IL-33 is expressed by oligodendrocytes and astrocytes during T. gondii infection, is released locally into the cerebrospinal fluid of T. gondii-infected animals, and is required for control of infection."

Authors: Still KM, Batista SJ, O'Brien CA, Oyesola OO, Früh SP, Webb LM, Smirnov I, Kovacs MA, Cowan MN, Hayes NW, Thompson JA, Tait Wojno ED, Harris TH

Species

Mouse

Dilution

1:500

Year

2020

[View more IHC \(F\) references on thermofisher.com](#)

## More applications with references on thermofisher.com

ICC/IF (9)

Flow (168)

ELISA (1)

IP (2)

Neu (2)

FN (3)

IA (3)

BLOCK (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.