

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

Product Details	
Size	50 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), Functional Grade, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	M5/114.15.2
Conjugate	Functional Grade
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	no preservative
Storage conditions	4° C
RRID	AB_469098

Applications	Tested Dilution	Publications
Western Blot (WB)	-	2 Publications
Immunohistochemistry (IHC)	-	18 Publications
Immunocytochemistry (ICC/IF)	-	3 Publications
Flow Cytometry (Flow)	0.125 µg/test	65 Publications
Immunoprecipitation (IP)	-	2 Publications
Neutralization (Neu)	Assay-Dependent	-
Functional Assay (FN)	Assay-Dependent	-
Immunomicroscopy (IM)	-	1 Publication
Inhibition Assays (IA)	-	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: M5/114.15.2 has been reported for use in flow cytometric analysis and in vitro blocking of T cell proliferative responses.

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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Storage and handling: Use in a sterile environment.

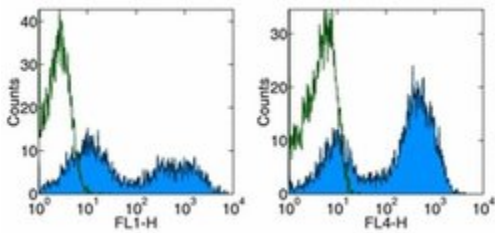
Filtration: 0.2 µm post-manufacturing filtered.

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

Endotoxin Level: Less than 0.001 ng/µg antibody, as determined by LAL assay.

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

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



MHC Class II (I-A/I-E) Antibody (16-5321-81) in Flow

Staining of mouse splenocytes with Anti-Mouse MHC Class II (I-A/I-E) FITC (left) and APC (right). Appropriate isotype controls were used (open histogram). Total viable cells were used for analysis.

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

Western Blot (2)

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 # 16-5321-81) in Immunoprecipitation"
 Authors: Huang L,Fang X,Zhang X,Wu W,Yao H,Fang Q

Species
Not Applicable

Dilution
Not Cited

Year
2021

The Journal of experimental medicine

The intramembrane protease SPPL2a promotes B cell development and controls endosomal traffic by cleavage of the invariant chain.

"16-5321 was used in Immuno-electron microscopy to investigate the role of SPPL2a in the cleavage of type 2 transmembrane proteins, showing that it promotes B cell development and controls endosomal traffic."

Authors: Schneppenheim J,Dressel R,Hüttl S,Lüllmann-Rauch R,Engelke M,Dittmann K,Wienands J,Eskelinen EL, Hermans-Borgmeyer I,Fluhrer R,Saftig P,Schröder B

Species
Mouse

Dilution
Not Cited

Year
2013

Immunohistochemistry (18)

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 # 16-5321-81) in Immunofluorescence"
 Authors: Klein B,Mrowetz H,Barker CM,Lange S,Rivera FJ,Aigner L

Species
Not Applicable

Dilution
Not Cited

Year
2020

Scientific reports

Intravitreal injection of adenosine A_{2A} receptor antagonist reduces neuroinflammation, vascular leakage and cell death in the retina of diabetic mice.

"Published figure using MHC Class II (I-A/I-E) monoclonal antibody (Product # 16-5321-81) in Immunohistochemistry"
 Authors: Aires ID,Madeira MH,Boia R,Rodrigues-Neves AC,Martins JM,Ambrósio AF,Santiago AR

Species
Not Applicable

Dilution
Not Cited

Year
2019

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

More applications with references on thermofisher.com

ICC/IF (3) Flow (65) IP (2) IM (1) IA (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.