

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	2 Publications
Immunohistochemistry (IHC)	-	45 Publications
Immunohistochemistry (Paraffin) (IHC (P))	Assay-Dependent	-
Immunohistochemistry (Frozen) (IHC (F))	Assay-Dependent	6 Publications
Immunocytochemistry (ICC/IF)	-	10 Publications
Flow Cytometry (Flow)	0.125 µg/test	174 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.).

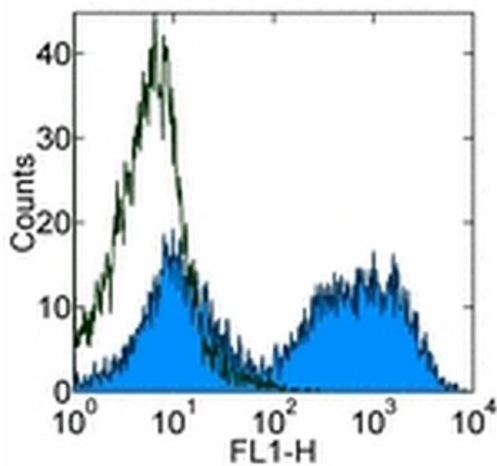
Applications Tested: The M5/114.15.2 antibody has been tested by flow cytometric analysis of mouse splenocytes and can be used at less than or equal to 0.125 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ 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](#)

250 References

Western Blot (2)

The Journal of neuroscience : the official journal of the Society for Neuroscience

Increased Microglial Activity, Impaired Adult Hippocampal Neurogenesis, and Depressive-like Behavior in Microglial VPS35-Depleted Mice.

"14-5321-82 was used in Western Blot to identify an important role of microglial VPS35 in suppressing microglial activation and promoting hippocampal neurogenesis, which are both processes involved in AD pathogenesis."

Authors: Appel JR, Ye S, Tang F, Sun D, Zhang H, Mei L, Xiong WC

Species
Mouse

Dilution
Not Cited

Year
2018

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 (45)

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, Luebecke JI

Species

Mouse

Dilution

1:250

Year

2022

Cell reports

Replicative senescence dictates the emergence of disease-associated microglia and contributes to A pathology.

"14-5321-82 was used in Immunohistochemistry to show that the early and sustained microglial proliferation seen in an AD-like model promotes replicative senescence, characterized by increased gal activity, a senescence-associated transcriptional signature, and telomere shortening, correlating with the appearance of disease-associated microglia (DAM) and senescent microglial profiles in human post-mortem AD cases."

Authors: Hu Y, Fryatt GL, Ghorbani M, Obst J, Menassa DA, Martin-Estebane M, Muntslag TAO, Olmos-Alonso A, Guerrero-Carrasco M, Thomas D, Cragg MS, Gomez-Nicola D

Species

Mouse

Dilution

1:500

Year

2021

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

More applications with references on thermofisher.com

IHC (F) (6)

ICC/IF (10)

Flow (174)

ELISA (1)

IP (2)

Neu (2)

FN (3)

IA (3)

BLOCK (1)

Misc (1)

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