

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

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), APC-eFluor™ 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	M5/114.15.2
Conjugate	APC-eFluor™ 780
Excitation/Emission Max	756/785 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_1548783

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	0.5 µg/test	101 Publications

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 0.5 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.

APC-eFluor 780 emits at 780 nm and is excited with the Red laser (633 nm). Please make sure that your instrument is capable of detecting this fluorochrome.

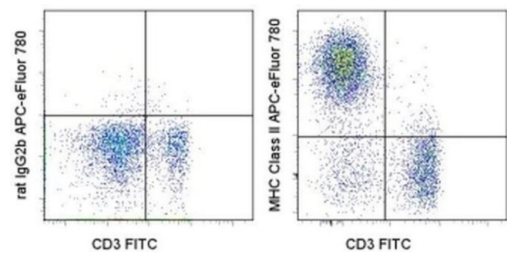
Light sensitivity: This tandem is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL 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: 633-647 nm; Emission: 780 nm; Laser: Red Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For MHC Class II (I-A/I-E) Monoclonal Antibody (M5/114.15.2), APC-eFluor™ 780, eBioscience™



MHC Class II (I-A/I-E) Antibody (47-5321-82) in Flow
Staining of C57BL/6 splenocytes with Anti-Mouse CD3e FITC (Product # 11-0031-82) and 0.25 µg of Rat IgG2b K Isotype Control APC-eFluor® 780 (Product # 47-4031-82) (left) or 0.25 µg of Anti-Mouse MHC Class II (I-A/I-E) APC-eFluor® 780 (right). Total viable cells were used for analysis.

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Immunohistochemistry (1)

Genes & development	Year 2022
Modeling diverse genetic subtypes of lung adenocarcinoma with a next-generation alveolar type 2 organoid platform.	Species Mouse
"47-5321-82 was used in Immunohistochemistry to show that this organoid platform is a powerful, versatile new model system to study LUAD."	Dilution 1:500
Authors: Naranjo S,Cabana CM,LaFave LM,Romero R,Shanahan SL,Bhutkar A,Westcott PMK,Schenkel JM,Ghosh A,Liao LZ,Del Priore I,Yang D,Jacks T	

Immunocytochemistry (1)

Immunity	Year 2020
Excessive Polyamine Generation in Keratinocytes Promotes Self-RNA Sensing by Dendritic Cells in Psoriasis.	Species Mouse
"47-5321-82 was used in Immunocytochemistry to suggest that urea cycle hyperreactivity and excessive polyamine generation in psoriatic keratinocytes promote self-RNA sensation and PP6 deregulation in keratinocytes is a pivotal event that amplifies the inflammatory circuits in psoriasis."	
Authors: Lou F,Sun Y,Xu Z,Niu L,Wang Z,Deng S,Liu Z,Zhou H,Bai J,Yin Q,Cai X,Sun L,Wang H,Li Q,Wu Z,Chen X,Gu J,Shi YL,Tao W,Ginhoux F,Wang H	

Flow Cytometry (101)

Cell reports	Year 2022
Endocytic membrane repair by ESCRT-III controls antigen export to the cytosol during antigen cross-presentation.	Species Mouse
"47-5321-82 was used in Flow cytometry/Cell sorting to demonstrate that membrane repair proves crucial in containing antigen export to the cytosol and cross-presentation in cDCs."	
Authors: Gros M,Segura E,Rookhuizen DC,Baudon B,Heurtebise-Chrétien S,Burgdorf N,Maurin M,Kapp EA,Simpson RJ,Kozik P,Villadangos JA,Bertrand MJM,Burbage M,Amigorena S	

Nature communications	Year 2022
Cancer cells dying from ferroptosis impede dendritic cell-mediated anti-tumor immunity.	Species Mouse
"47-5321-82 was used in Flow cytometry/Cell sorting to show that ferroptosis negatively impacts antigen presenting cells and hence the adaptive immune response, which might hinder therapeutic applications of ferroptosis induction."	Dilution 1:100
Authors: Wiernicki B,Maschalidi S,Pinney J,Adjemian S,Vanden Berghe T,Ravichandran KS,Vandenabeele P	

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