

For Research Use Only

# Biotin Anti-Mouse MHC Class II (I-A/I-E) (M5/114.15.2) Rat IgG2a Recombinant Antibody

Catalog Number: Biotin-65663



## Basic Information

|                                           |                                                                      |                                                                                               |
|-------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Catalog Number:</b><br>Biotin-65663    | <b>GenBank Accession Number:</b><br>BC031711                         | <b>Purification Method:</b><br>Protein A purification                                         |
| <b>Concentration:</b><br>100ug, 500 ug/ml | <b>GeneID (NCBI):</b><br>14960                                       | <b>CloneNo.:</b><br>M5/114.15.2                                                               |
| <b>Source:</b><br>Rat                     | <b>Full Name:</b><br>histocompatibility 2, class II antigen A, alpha | <b>Recommended Dilutions:</b><br>FC: 0.25 ug per 10 <sup>6</sup> cells in a 100 µl suspension |
| <b>Isotype:</b><br>IgG2a                  |                                                                      | <b>Excitation/Emission maxima wavelengths:</b><br>-                                           |

## Applications

|                                      |                                                                            |
|--------------------------------------|----------------------------------------------------------------------------|
| <b>Tested Applications:</b><br>FC    | <b>Positive Controls:</b><br>FC : Anti-CD3/CD28 treated mouse splenocytes, |
| <b>Species Specificity:</b><br>mouse |                                                                            |

## Background Information

Major histocompatibility complex (MHC) class II molecules are heterodimeric transmembrane glycoproteins that are expressed on the surface of antigen-presenting cells such as dendritic cells, macrophages, and B cells. The M5/114.15.2 antibody detects polymorphic determinants present on B cells, monocytes, macrophages, dendritic cells, and activated T lymphocytes from mice carrying the H-2b, H-2d, H-2q, H-2p, H-2r and H-2u haplotypes but not from mice carrying the H-2s or H-2f haplotypes (PMID: 6170707). This antibody recognizes both I-A and I-E subregion-encoded Ia glycoproteins (I-Ab, I-Ad, I-Aq, I-Ed, I-Ek, not I-Af, I-Ak, or I-As). M5/114 antibody is reported to inhibit I-A subregion-restricted T cell responses of the H-2b, H-2d, H-2q, H-2u but not the H-2f, H-2k, H-2s haplotypes (PMID: 6173436).

## Storage

**Storage:**  
Store at 2-8°C. Avoid exposure to light. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.09% sodium azide, pH7.3

For technical support and original validation data for this product please contact:

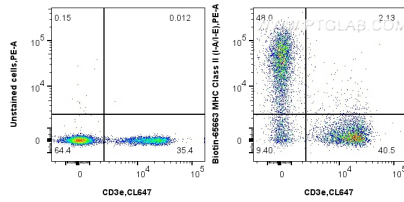
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E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

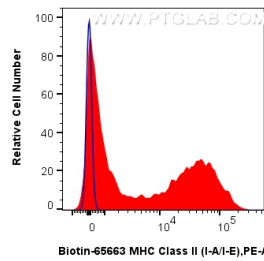
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## Selected Validation Data



1x10<sup>6</sup> anti-CD3/CD28 treated mouse splenocytes were unstained or surface stained with 0.25 ug Biotin Anti-Mouse MHC Class II (I-A/I-E) (M5/114.15.2) Rat IgG2a RecAb (Biotin-65663, Clone: M5/114.15.2) and PE-conjugated streptavidin. Cells were co-stained with 0.25 ug CoraLite® Plus 647 Anti-Mouse CD3e (145-2C11) (CL647-65060, Clone: 145-2C11). Cells were not fixed.



1x10<sup>6</sup> anti-CD3/CD28 treated mouse splenocytes were surface stained with 0.25 ug Biotin Anti-Mouse MHC Class II (I-A/I-E) (M5/114.15.2) Rat IgG2a RecAb (Biotin-65663, Clone: M5/114.15.2) and PE-conjugated streptavidin (red) or unstained (blue). Cells were not fixed.