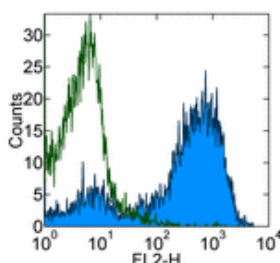


## Anti-Mouse Ea52-68 peptide bound to I-Ab Purified

Catalog Number: 14-5741

Also Known As: I-Ab-Ea52-68, Ea52-68

RUO: For Research Use Only



Staining of peripheral blood from a mouse strain known to express the Ea52-68 peptide:I-A<sup>b</sup> complex with 0.5 µg of Mouse IgG2b κ Isotype Control Purified (cat. 14-4732) (open histogram) or 0.5 µg of Anti-Mouse Ea52-68 peptide bound to I-Ab Purified (filled histogram) followed by Anti-Mouse IgG Biotin (cat. 13-4013) and Streptavidin PE (cat. 12-4317). Cells in the lymphocyte gate were used for analysis.

### Product Information

Contents: Anti-Mouse Ea52-68 peptide bound to I-Ab Purified

**REF** Catalog Number: 14-5741

Clone: eBioY-Ae (Y-Ae, Y-Ae)

Concentration: 0.5 mg/ml

Host/Isotype: Mouse IgG2b

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer



Temperature Limitation: Store at 2-8°C.



Batch Code: Refer to Vial



Use By: Refer to Vial



Caution, contains Azide

### Description

The Y-Ae antibody reacts with a class II major histocompatibility complex (MHC) self Ea peptide (peptide 52-68) bound to I-Ab molecules. The Y-Ae antibody detects a determinant expressed on a subset of class II I-Ab molecules in strains that also express class II I-Eb. This determinant is expressed on peripheral B cells and on cells in the thymic medulla, but not thymic cortical epithelium. In addition to B cells, the Y-Ae determinant is expressed at comparable levels on other antigen presenting cells, including macrophages and dendritic cells. The antibody does not react with invariant chain-associated class II MHC complexes.

The reactivity of the Y-Ae antibody is MHC-restricted. The Y-Ae antibody was generated by immunization of [B10.MBR x B10.D2]F1 recipients with B10A(5R) LPS blasts. In this strain combination, there is incompatibility for I-Ab and I-Eb molecules. The antibody reacts with 10-15% of surface I-Ab molecules in strains that also express surface I-Eb molecules (e.g., strains B10.A(5R) and B10.A(3R)). The antibody does not react with I-A molecules in strains that have a non-functional I-E (a chain) gene (e.g., strains B6 and B10), nor with mutant I-A molecules (e.g., (B6.c-H-2bm-12 x A.TFR5)F1), nor with any other strain tested. The Y-Ae antibody recognizes an Ea peptide (Ea 52-68) bound to I-Ab molecules, but not to Ea 52-68 peptide bound to I-Ak or I-Abm-12 molecules.

### Applications Reported

This eBioY-Ae (Y-Ae, Y-Ae) antibody has been reported for use in flow cytometric analysis.

### Applications Tested

This eBioY-Ae (Y-Ae, Y-Ae) antibody has been tested by flow cytometric analysis of a mouse strain known to express the I-A(b)/MHC Class II:Ea peptide complex. 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 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.

### References

Murphy DB, Lo D, Rath S, Brinster RL, Flavell RA, Slanetz A, Janeway CA Jr. A novel MHC class II epitope expressed in thymic medulla but not cortex. *Nature*. 1989 Apr 27;338(6218):765-8. (Y-Ae, FC, WB, IHC, PubMed)

Rudensky AY, Rath S, Preston-Hurlburt P, Murphy DB, Janeway CA Jr. On the complexity of self. *Nature*. 1991 Oct 17;353(6345):660-2. (Y-Ae, FC, WB, PubMed)

Oono T, Fukui Y, Masuko S, Hashimoto O, Ueno T, Sanui T, Inayoshi A, Noda M, Sata M, Sasazuki T. Organ-specific autoimmunity in mice whose T cell repertoire is shaped by a single antigenic peptide. *J Clin Invest*. 2001 Dec;108(11):1589-96. (Y-Ae, FC, IHC, PubMed)

### Related Products

11-4011 Anti-Mouse IgG FITC  
11-4317 Streptavidin FITC  
12-4317 Streptavidin PE  
13-4013 Anti-Mouse IgG Biotin (Polyclonal)  
14-4732 Mouse IgG2b K Isotype Control Purified  
17-4317 Streptavidin APC

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