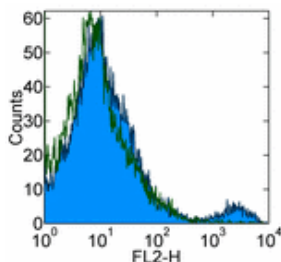


## Anti-Mouse Ly-49A/D Purified

Catalog Number: 14-5783

Also Known As: Ly49A, Ly49D

RUO: For Research Use Only



Staining of 3-day Mouse IL-2 Recombinant Protein (cat. 14-8021)-stimulated mouse splenocytes with 0.25 µg of Rat IgG2a κ Isotype Control Purified (cat. 14-4321) (open histogram) or 0.25 µg of Anti-Mouse Ly-49A/D Purified (filled histogram) followed by Anti-Rat IgG Biotin (cat. 13-4813) and Streptavidin PE (cat. 12-4317). Total viable cells were used for analysis.

### Product Information

Contents: Anti-Mouse Ly-49A/D Purified

**REF** Catalog Number: 14-5783

Clone: eBio12A8 (12A8)

Concentration: 0.5 mg/ml

Host/Isotype: Rat IgG2a, κ

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 eBio12A8 antibody reacts with Ly-49A and Ly-49D. The Ly-49 family of NK-cell receptors, members of the C-type lectin superfamily, are disulfide-linked type-II transmembrane protein homodimers with extracellular carbohydrate-recognition domains which bind to MHC class I alloantigens. The Ly-49 family members are expressed independently, such that an individual NK or T cell may display more than one class of Ly-49 receptor homodimers. Ly-49D is expressed on subsets of natural killer cells in C57BL/6, C3H/He, and SJL mice, but not DBA/2, AKR, CBA/J, or BALB/c mice. The Ly-49D antigen has not been detected on NK-1.1+ T cells. The Ly-49D receptor has been implicated in mediation of NK cell cytotoxicity. Ly-49D is an activating receptor while Ly-49A is an inhibitory receptor.

eBio12A8 does not react with BALB/c, DBA/2, AKR, or CBA/J Ly-D49D.

### Applications Reported

This eBio12A8 (12A8) antibody has been reported for use in flow cytometric analysis, and immunoprecipitation.

### Applications Tested

This eBio12A8 (12A8) antibody has been tested by flow cytometric analysis of cultured 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 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.

Direct conjugates are recommended for flow cytometric analysis.

### References

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Ortaldo, J.R., et al. 1998. The Ly-49 family: regulation of cytotoxicity and cytokine production in murine CD3+ cells. *J. Immunol.* 160: 1158 - 1165.

Takei, F., et al. 1997. The Ly-49 family: genes, proteins and recognition of class I MHC. *Immunol. Rev.* 155: 67 – 77.

Ortaldo, J.R., et al. 1999. Ly-49 receptor expression and functional analysis in multiple mouse strains. *J. Leukoc. Biol.* 66: 512 - 520.

Nakamura MC, Hayashi S, Niemi EC, Ryan JC, Seaman WE. Activating Ly-49D and inhibitory Ly-49A natural killer cell receptors demonstrate distinct requirements for interaction with H2-D(d). *J Exp Med.* 2000 Aug 7;192(3):447-54. (PubMed)

Related Products

11-4317 Streptavidin FITC

11-4811 Anti-Rat IgG FITC

12-4317 Streptavidin PE

13-4813 Anti-Rat IgG Biotin (Polyclonal)

14-4321 Rat IgG2a K Isotype Control Purified

17-4317 Streptavidin APC

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