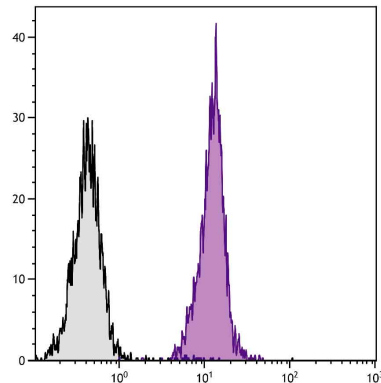




Mouse Anti-Mouse H-2D^b

| Cat. No. | Format | Size |
|----------|--------------------------------------|--------|
| 1910-01 | Purified (UNLB) | 0.5 mg |
| 1910-02 | Fluorescein (FITC) | 0.5 mg |
| 1910-08 | Biotin (BIOT) | 0.5 mg |
| 1910-09 | R-phycoerythrin (PE) | 0.1 mg |
| 1910-11 | Allophycocyanin (APC) | 0.1 mg |
| 1910-14 | Low Endotoxin, Azide-Free (LE/AF) | 0.5 mg |
| 1910-30 | Alexa Fluor [®] 488 (AF488) | 0.1 mg |



BALB/c mouse splenocytes were stained with Mouse Anti-Mouse H-2D^b-AF488 (SB Cat. No. 1910-30).

Overview

| | |
|--------------------------|---------------------------------|
| Clone | 28-14-8 |
| Isotype | Mouse (C3H) IgG _{2a} K |
| Immunogen | C3H.SW mouse splenocytes |
| Specificity | Mouse H-2D ^b |
| Alternate Name(s) | MHC Class I |

Description

The “classical” MHC Class I molecules are histocompatibility antigens encoded by the H-2 gene complex and consist of heterodimers of highly polymorphic α chains noncovalently associated with the invariant β_2 -microglobulin. These antigens are expressed on most nucleated cells but expression varies on different cell types. MHC Class I molecules present endogenously synthesized peptides to CD8⁺ T lymphocytes which are usually cytotoxic T cells. MHC Class I antigens expressed on thymic epithelial cells regulate the positive and negative selection of CD8⁺ T cells during T cell ontogeny. The monoclonal antibody 28-14-8 binds to the $\alpha 3$ domain of H-2D^b in the presence or absence of β_2 microglobulin. It cross reacts with the $\alpha 3$ domain of H-2L^d, but not K^d or D^d, and with H-2D^q and/or L^q. The antibody has been shown to block H-2L^d-specific and H-2L^d-restricted antigen-specific lysis of target cells by cytotoxic T lymphocytes but it does not block recognition of H-2L^d-positive target cells by Ly-6G2-positive NK cells.

Applications

FC – Quality tested ^{4,7,8}
 IHC-FS – Reported in literature ⁴
 IP – Reported in literature ^{2,3}
 Block – Reported in literature ⁶
 CMCD – Reported in literature ^{1,5,6}

Working Dilutions

| | | |
|-----------------------|---|-----------------------------------|
| Flow Cytometry | Purified (UNLB) antibody | $\leq 1 \mu\text{g}/10^6$ cells |
| | FITC, BIOT, and AF488 conjugates | $\leq 1 \mu\text{g}/10^6$ cells |
| | PE conjugate | $\leq 0.5 \mu\text{g}/10^6$ cells |
| | APC conjugate | $\leq 0.1 \mu\text{g}/10^6$ cells |
| | For flow cytometry, the suggested use of these reagents is in a final volume of 100 μL . | |

Other Applications Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.

For Research Use Only. Not for Diagnostic or Therapeutic Use.

Handling and Storage

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) and allophycocyanin (APC) conjugates are supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of PBS. **Aliquot and store at or below -20°C.**
- The Alexa Fluor[®] 488 (AF488) conjugate is supplied as 0.1 mg in 0.2 mL of PBS/NaN₃. Store at 2-8°C.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed

Warning

Some reagents contain sodium azide. Please refer to product specific SDS.

References

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3. Lie W, Myers NB, Connolly JM, Gorka J, Lee DR, Hansen TH. The specific binding of peptide ligand to L^d class I major histocompatibility complex molecules determines their antigenic structure. *J Exp Med.* 1991;173:449-59. (IP)
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7. Wang R, Rogers AM, Ratliff TL, Russell JH. CD95-dependent bystander lysis caused by CD4⁺ T helper 1 effectors. *J Immunol.* 1996;157:2961-8. (FC)
8. Lee S, Bar-Haim E, Machlenkin A, Goldberger O, Volovitz I, Vadai E, et al. In vivo rejection of tumor cells dependent on CD8 cells that kill independently of perforin and FasL. *Cancer Gene Ther.* 2004;11:237-48. (FC)

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