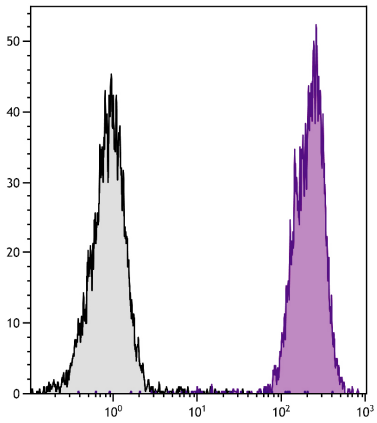
SouthernBiotech

Mouse Anti-Mouse H-2D^{d}

Cat. No.	Format	Size
1912-01	Purified (UNLB)	0.5 mg
1912-02	Fluorescein (FITC)	0.5 mg
1912-08	Biotin (BIOT)	0.5 mg
1912-09	R-phycoerythrin (PE)	0.1 mg



DBA/2 mouse splenocytes were stained with Mouse Anti-Mouse H-2D^{d}-PE (SB Cat. No. 1912-09).

Overview

Clone	34-5-8S
Isotype	Mouse (C3H) IgG$_{2a}\kappa$
Immunogen	BDF$_1$ mouse splenocytes
Specificity	Mouse H-2D^{d}
Alternate Name(s)	MHC Class I

Description

The monoclonal antibody 34-5-8S reacts with a conformational epitope on H-2D^{d} MHC Class I found on the N-terminal domains of α1 and α2 chains when complexed with β_2-microglobulin. The antibody does not react with H-2D^{d} α chains synthesized *in vitro*. Weak cross-reactivity with cells from mice of the H-2^{b}, H-2^{q}, and H-2^{s} haplotypes has been observed by flow cytometric analysis. Reactivity with cells from mice of the H-2^{f}, H-2^{k}, H-2^{p}, and H-2^{r} haplotypes has not been observed. 34-5-8S has been reported to block the recognition of H-2D^{d} by Ly-49A^{+}, Ly-49C^{+}, and Ly-49G2^{+} natural killer cells.

Applications

FC – Quality tested [8]
ICC – Reported in literature [8]
IP – Reported in literature [4,5,8]
CMCD – Reported in literature [1]
Adhesion – Reported in literature [2,3]
Block – Reported in literature [2,3]
Purification – Reported in literature [2,6]
ELISA – Reported in literature [6,7]

Working Dilutions

Flow Cytometry	FITC and BIOT conjugates	$\leq$ 1 μg/10^6 cells
	PE conjugate	$\leq$ 0.1 μg/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.

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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/NaN_3. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN_3. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN_3 and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- 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 (M)SDS.

References

1. Ozato K, Mayer NM, Sachs DH. Monoclonal antibodies to mouse major histocompatibility complex antigens. IV. A series of hybridoma clones producing anti-H-2^d antibodies and an examination of expression of H-2^d antigens on the surface of these cells. Transplantation. 1982;34:113-9. (Immunogen, CMCD)
2. Kane KP. Ly-49 mediates EL4 lymphoma adhesion to isolated class I major histocompatibility complex molecules. J Exp Med. 1994;179:1011-5. (Block, Purification, Adhesion)
3. Brennan J, Mahon G, Mager DL, Jefferies WA, Takei F. Recognition of class I major histocompatibility complex molecules by Ly-49: specificities and domain interactions. J Exp Med. 1996;183:1553-9. (Block, Adhesion)
4. Beck JC, Hansen TH, Cullen SE, Lee DR. Slower processing, weaker β_2-M association, and lower surface expression of H-$2L^d$ are influenced by its amino terminus. J Immunol. 1986;137:916-23. (IP)
5. 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)
6. White J, Crawford F, Fremont D, Marrack P, Kappler J. Soluble class I MHC with β_2-microglobulin covalently linked peptides: specific binding to a T cell hybridoma. J Immunol. 1999;162:2671-6. (Purification, ELISA)
7. Mage MG, Lee Li, Ribaudo RK, Corr M, Kozlowski S, McHugh L, et al. A recombinant, soluble, single-chain class I major histocompatibility complex molecule with biological activity. Proc Natl Acad Sci USA. 1992;89:10658-62. (ELISA)
8. Paquet M, Cohen-Doyle M, Shore GC, Williams DB. Bap29/31 influences the intracellular traffic of MHC class I molecules. J Immunol. 2004;172:7548-55. (IP, ICC, FC)

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