

Technical Data Sheet

PE Mouse Anti-Mouse H-2D[d]

Product Information

Material Number:	558917
Size:	0.1 mg
Concentration:	0.2 mg/ml
Clone:	34-5-8S
Immunogen:	(C57BL/6 x DBA/2)F1 hybrid mouse splenocytes
Isotype:	Mouse (C3H) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The 34-5-8S antibody recognizes an epitope on the N-terminal domains, $\alpha 1$ and $\alpha 2$, of the H-2Dd. The mAb identifies a conformationally sensitive epitope of H-2Dd associated with $\beta 2$ microglobulin; it fails to react with free H-2D[d] α chains synthesized in vitro. Weak cross-reactivity with cells from mice of the H-2b, H-2q, and H-2s haplotypes has been observed by flow cytometric analysis. Reactivity with other haplotypes (e.g., *f*, *k*, *p*, *r*) has not been observed. mAb 34-5-8S has been reported to block the recognition of H-2Dd by Ly-49A+, C+, F+, G2+, or I+ NK cells or transfectants.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed by gel filtration chromatography.

Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
553457	PE Mouse IgG2a, κ Isotype Control	0.1 mg	G155-178

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/pharmingen/colors.
4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

- 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(4):1553-1559.(Biology)
- Chang CS, Kane KP. Evidence for sulfate modification of H-2Dd on N-linked carbohydrate(s): possible involvement in Ly-49A interaction. *J Immunol*. 1998; 160(9):4367-4374.(Biology)
- Daniels BF, Karlsrufer FM, Seaman WE, Yokoyama WM. A natural killer cell receptor specific for a major histocompatibility complex class I molecule. *J Exp Med*. 1994; 180(2):687-692.(Biology)
- Evans GA, Margulies DH, Shykind B, Seidman JG, Ozato K. Exon shuffling: mapping polymorphic determinants on hybrid mouse transplantation antigens. *Nature*. 1982; 300(5894):755-757.(Biology)

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Hanke T, Takizawa H, McMahon CW, et al. Direct assessment of MHC class I binding by seven Ly49 inhibitory NK cell receptors. *Immunity*. 1999; 11(1):67-77. (Biology)

Kane KP. Ly-49 mediates EL4 lymphoma adhesion to isolated class I major histocompatibility complex molecules. *J Exp Med*. 1994; 179(3):1011-1015.(Biology)

Mason LH, Ortaldo JR, Young HA, Kumar V, Bennett M, Anderson SK. Cloning and functional characteristics of murine large granular lymphocyte-1: a member of the Ly-49 gene family (Ly-49G2). *J Exp Med*. 1995; 182(2):293-303.(Biology)

Orihuela M, Margulies DH, Yokoyama WM. The natural killer cell receptor Ly-49A recognizes a peptide-induced conformational determinant on its major histocompatibility complex class I ligand. *Proc Natl Acad Sci U S A*. 1996; 93(21):11792-11797.(Biology)

Otten GR, Bikoff E, Ribaudo RK, Kozlowski S, Margulies DH, Germain RN. Peptide and beta 2-microglobulin regulation of cell surface MHC class I conformation and expression. *J Immunol*. 1992; 148(12):3723-3732.(Biology)

Ozato K, Sachs DH. Monoclonal antibodies to mouse MHC antigens. III. Hybridoma antibodies reacting to antigens of the H-2b haplotype reveal genetic control of isotype expression. *J Immunol*. 1981; 126(1):317-321.(Immunogen)