

Technical Data Sheet

Biotin Mouse Anti-Mouse H-2D[b]

Product Information

Material Number:	553601
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	28-14-8
Immunogen:	C3H.SW mouse splenocytes
Isotype:	Mouse (C3H) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The 28-14-8 antibody reacts with the $\alpha 3$ domain of the H-2D[b] MHC class I alloantigen. The antibody binds to H-2D[b] in the presence or absence of the $\beta 2$ microglobulin chain. It cross-reacts with the $\alpha 3$ domain of H-2L[d], but not with K[d] or D[d], and with H-2D[q] and/or L[q]. Reactivity with haplotypes *k*, *f*, *p*, *r*, and *s* has not been observed. mAb 28-14-8 has been shown to block H-2L[d]-specific and H-2L[d]-restricted antigen-specific lysis of target cells by cytotoxic T lymphocytes (CTL), but it does not block recognition of H-2L[d] positive target cells by Ly-6G2-positive NK cells.

Preparation and Storage

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

The antibody was conjugated with biotin under optimum conditions, and unreacted biotin was removed.

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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Recommended Assay Procedure:

For immunohistochemical staining of cells expressing MHC class I antigen of the *b* haplotype, we recommend the use of the biotinylated anti-mouse H-2Kb mAb AF6-88.5 in our special formulation for immunohistochemistry, Cat. no. 550550.

Suggested Companion Products

Catalog Number	Name	Size	Clone
553455	Biotin Mouse IgG2a, κ Isotype Control	0.25 mg	G155-178
550550	Biotin Mouse Anti-Mouse H-2K[b]	1.0 ml	AF6-88.5

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. 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

- Allen H, Fraser J, Flyer D, Calvin S, Flavell R. Beta 2-microglobulin is not required for cell surface expression of the murine class I histocompatibility antigen H-2Db or of a truncated H-2Db. *Proc Natl Acad Sci U S A*. 1986; 83(19):7447-7451.(Clone-specific: Immunoprecipitation)
- Allen H, Wraith D, Pala P, Askonas B, Flavell RA. Domain interactions of H-2 class I antigens alter cytotoxic T-cell recognition sites. *Nature*. 1984; 309(5965):279-281.(Clone-specific: Radioimmunoassay)
- 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.(Clone-specific: Radioimmunoassay)
- Kündig TM, Bachmann MF, DiPaolo C. Fibroblasts as efficient antigen-presenting cells in lymphoid organs. *Science*. 1995; 268(5215):1343-1347.(Clone-specific: Blocking)
- 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.(Clone-specific: Blocking)

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Orn A, Goodenow RS, Hood L. Product of a transferred H-2Ld gene acts as restriction element for LCMV-specific killer T cells. *Nature*. 1982; 297(5865):415. (Clone-specific: Blocking)

Ozato K, Hansen TH, Sachs DH. Monoclonal antibodies to mouse MHC antigens. II. Antibodies to the H-2Ld antigen, the products of a third polymorphic locus of the mouse major histocompatibility complex. *J Immunol*. 1980; 125(6):2473-2477. (Immunogen: Cytotoxicity)

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: Cytotoxicity)

Woodward JG, Orn A, Harmon RC, Goodenow RS, Hood L, Frelinger JA. Specific recognition of the product of a transferred major histocompatibility complex gene by cytotoxic T lymphocytes. *Proc Natl Acad Sci U S A*. 1982; 79(11):3613-3617. (Clone-specific: Blocking)