Technical Data Sheet

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

Product Information

 Material Number:
 553577

 Size:
 0.5 mg

 Concentration:
 0.5 mg/ml

 Clone:
 34-2-12

Immunogen: (C57BL/6 x DBA/2)F1 mouse splenocytes

 Isotype:
 Mouse (C3H) IgG2a, κ

 Reactivity:
 QC Testing: Mouse

Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 34-2-12 antibody (also known as 34-2-12S) recognizes the α 3 domain of the H-2D[d]. The binding of the antibody to its epitope is independent of the α 1 and α 2 domains and β 2 microglobulin. It cross-reacts with cells of the C3H.LG/Ckc strain. Reactivity with other haplotypes (eg, *b*, *f*, *k*, *p*, *q*, *r*, *s*) has not been observed. Soluble mAb 34-2-12 blocks binding of the Ly-49A-expressing T lymphoma EL4 to immobilized H-2D[d]. However, further studies utilizing this mAb indicate that the α 3 domain is not involved in the interaction between Ly-49A, or Ly-49G2, and H-2D[d].

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. Store undiluted at 4° C.

Application Notes

Application

| Application | | | |
|---------------------|------------------|--|--|
| Flow cytometry | Routinely Tested | | |
| Cytotoxicity | Reported | | |
| Immunoprecipitation | Reported | | |
| Blocking | Reported | | |

Recommended Assay Procedure:

Other reported applications include complement-dependent cytotoxicity, immunoprecipitation, and blocking of EL4 cell adhesion to H-2D[d]. For immunohistochemical staining (IHC) of frozen sections expressing MHC class I antigen of the *d* haplotype, we recommend the use of biotinylated anti-mouse H-2K[d] mAb SF1-1.1, Cat. No. 553564. mAb SF1-1.1 is not recommended for IHC of formalin-fixed paraffin-embedded sections.

Suggested Companion Products

| Catalog Number | Name | Size | Clone |
|----------------|--|--------|----------|
| 553454 | Purified Mouse IgG2a κ Isotype Control | 0.5 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. 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.

BD Biosciences

www.bdbiosciences.com

United States Canada Europe Japan Asia Pacific Latin America/Caribbear 877.232.8995 888.259.0187 32.53.720.550 0120.8555.90 65.6861.060 55.687.000 57

or country-specific contact information, visit www.bdbiosciences.com/how_to_order/

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2007 BD



553577 Rev. 13 Page 1 of 2

References

Daniels BF, Karlhofer 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.(Clone-specific: Blocking)

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)

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

Karlhofer FM, Ribaudo RK, Yokoyama WM. MHC class I alloantigen specificity of Ly-49+ IL-2-activated natural killer cells. *Nature*. 1992; 358(6381):66-70.(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)

McCluskey J, Bluestone JA, Coligan JE, Maloy WL, Margulies DH. Serologic and T cell recognition of truncated transplantation antigens encoded by in vitro deleted class I major histocompatibility genes. *J Immunol.* 1986; 136(4):1472-1481.(Clone-specific: Immunoprecipitation)

McCluskey J, Germain RN, Margulies DH. Cell surface expression of an in vitro recombinant class II/class I major histocompatibility complex gene product. *J Immunol.* 1985; 40(2):247-257.(Clone-specific: Immunoprecipitation)

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, Mayer NM, Sachs DH. Monoclonal antibodies to mouse major histocompatibility complex antigens. *Transplantation*. 1982; 34(3):113-120.(Immunogen: Cytotoxicity)

553577 Rev. 13 Page 2 of 2