Technical Data Sheet

Biotin Mouse Anti-Mouse Qa-2

Product Information

 Material Number:
 558973

 Size:
 0.1 mg

 Concentration:
 0.5 mg/ml

 Clone:
 1-1-2

Immunogen: C3H.SW mouse skin graft and splenocytes

Isotype: Mouse (C3H.KBR) IgG2a, κ

Reactivity: QC Testing: Mouse

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

Description

The 1-1-2 antibody reacts with the Qa-2 MHC class Ib antigen, which is expressed at higher levels on mature T lymphocytes than on B cells. Its expression is upregulated in the late stages of T-cell maturation. Qa-2 is a 40 kDa GPI-linked cell surface molecule encoded by the Q5, Q6, Q7, and/or Q9 genes of the H-2 complex. A 39 kDa soluble form results from alternative splicing of the transcript. Although Qa-2 is nonpolymorphic, its level of expression on both T and B lymphocytes varies among inbred mouse strains. High expressors include strains carrying the H-2[b] haplotype low expressors include H-2[d] strains, and H-2[k] strains are Qa-2-negative.

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

Application				
	Flow cytometry	Routinely Tested		
	Immunohistochemistry-frozen	Tested During Development		

Recommended Assay Procedure:

This antibody has been tested during development for immunohistochemical (IHC) application by staining of acetone-fixed frozen rmouse spleen and thymus tissue sections with the antibody concentration of 0.5- $10 \mu g/ml$. It's not tested for each lot for IHC application. Since applications vary, each investigator must determine dilutions appropriate for individual use.

Suggested Companion Products

Catalog Number	Name	Size	Clone
553455	Biotin Mouse IgG2a, κ Isotype Control	0.25 mg	G155-178
554060	FITC Streptavidin	0.5 mg	(none)

Product Notices

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 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

Gabor MJ, Godfrey DI, Scollay R. Recent thymic emigrants are distinct from most medullary thymocytes. *Eur J Immunol.* 1997; 27(8):2010-2050.(Biology) Sharrow SO, Arn JS, Stroynowski I, Hood L, Sachs DH. Epitope clusters of Qa-2 antigens defined by a panel of new monoclonal antibodies. *J Immunol.* 1989; 142(10):3495-3502.(Immunogen)

Shawar SM, Vyas JM, Rodgers JR, Rich RR. Antigen presentation by major histocompatibility complex class I-B molecules. *Annu Rev Immunol.* 1994; 12:839-880. (Biology)

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