

PRODUCT INSERT

MONOCLONAL ANTIBODY TO THE MOUSE CD79b ANTIGEN

Product	Form	Volume	Antibody*	Excitation	Peak Emission	Matching Isotype Controls	
				(nm)	(nm)		
HMCD79B01	FITC	1.0 ml	500 µg	488	525	Hamster IgG FITC	HM01
HMCD79B04	R-PE	1.0 ml	100 µg	488	575	Hamster IgG R-PE	HM04

**PRODUCT DESCRIPTION**

Hamster monoclonal antibody to the mouse CD79b antigen

**Clone:** HM79-12

**Isotype:** Armenian hamster IgGκ

**Lot No.:** See label      **Expiration:** See label

**Buffer:** Phosphate buffered saline (PBS)

**Preservatives:** 0.1% *sodium azide*. Sodium azide is an extremely toxic and dangerous compound particularly when combined with acids or metals. Solutions containing sodium azide should be disposed of properly.

**Stabilizer:** Sucrose.

**PRODUCT CHARACTERIZATION**

**Antigen Specificity:** Murine CD79 is a 23/21 kDa disulfide-linked heterodimer composed of an α chain (CD79a/mb-1) and a β chain (CD79b/B29) that associates non-covalently with membrane immunoglobulin (Ig) to form the B cell receptor (BCR) complex. Its expression is restricted to B lymphocytes, first appearing on the surface at the pro-B cell stage prior to productive Ig gene rearrangements and remaining through all stages of B-cell differentiation prior to plasma cells. It has been proposed that the CD79 complex on pro-B cell surfaces may function to induce early B-cell differentiation.<sup>1</sup>

**Research Applications:**

- Flow cytometry<sup>1</sup>
- Immunoprecipitation<sup>1</sup>
- Western blotting<sup>1</sup>
- Immunohistochemistry (frozen sections)<sup>2</sup>

**Note:** Flow cytometric data shown may not necessarily have been generated using the enclosed lot of reagent. For this reason, and due to differences in flow cytometers and cytometer settings, results may vary from those illustrated above. It is suggested that investigators titrate reagents to determine optimal conditions for use in their systems.

**STORAGE & HANDLING**

Store reagents at 2-8°C. Light exposure should be avoided for fluorochrome-conjugated reagents. Use dim light during handling, incubation with cells and prior to analysis. It is recommended that cells be analyzed within 18 hours of staining. If the reagent is being diluted, it is recommended that only the quantity to be used within one week be diluted.

**PRODUCT QUALITY CONTROL**

To ensure lot-to-lot consistency, each batch of monoclonal antibody is tested by flow cytometry to conform to characteristics of a standard reference reagent. From this testing it is recommended that between 0.1 and 0.2 µg of antibody be used per 1 x 10<sup>6</sup> cells in a 100 µl staining volume. Because conditions may vary, it is recommended that each investigator determine the optimal amount of antibody to be used for each application.

\* The amount of antibody is determined by measuring the optical density using a spectrophotometer. The antibody titer is verified by immunofluorescent staining and flow cytometric analysis.

**REFERENCES:**

1. Koyama, M., K. Ishihara, H. Karasuyama, J.L. Cordell, A. Iwamoto, and T. Nakamura. 1997. *Int. Immunol.* 9:1767.
2. Nakamura, T. Personal communication.

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