

PRODUCT INSERT

MONOCLONAL ANTIBODY TO THE MOUSE CD152 (CTLA-4) ANTIGEN

Product	Form	Volume	Antibody*	Excitation (nm)	Peak Emission (nm)	Matching Isotype Controls	
HMCD15201	FITC	1.0 ml	500 µg	488	525	Hamster IgG FITC	HM01
HMCD15204	R-PE	1.0 ml	100 µg	488	575	Hamster IgG R-PE	HM04

PRODUCT DESCRIPTION

Hamster monoclonal antibody to the mouse CD152 (CTLA-4) antigen

Clone: 1B8

Isotype: Armenian hamster IgG

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.

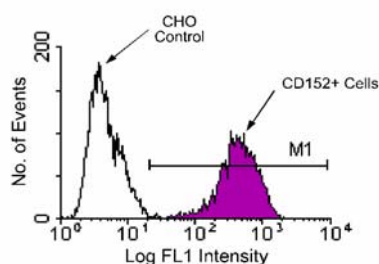
Stabilizer: Sucrose.

PRODUCT CHARACTERIZATION

Antigen Specificity: The lymphocyte surface antigen CD152, also known as CTLA-4, is related to the co-stimulatory molecule CD28, and both molecules share common B7 family counter-receptors.¹⁻⁴ However CD152 is thought to be a negative regulator of T cell activation¹⁻³ and may play a role in apoptotic control of T cells. CD152 exists as a 69 kDa homodimer¹, and is relatively conserved among humans, mice and chickens.²

Research Applications:

- Flow cytometry^{1,2}
- Immunoprecipitation¹
- *In vitro* functional studies^{1,2}
- Enhancement of tumor immunity³



CHO cells transfected with CD152/CTLA-4 were stained with either hamster IgG-FITC or hamster anti-mouse CD152-FITC, following which large cells were gated and analyzed by flow cytometry.

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 10⁶ 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. Walunas, T. L., *et al.* 1994. *Immunity* 1:405.
2. Perkins, D., *et al.* 1996. *J. Immunol.* 156:4154.
3. Leach, D. R., M.K. Krummel, and J.P. Allison. 1996. *Science* 271:1734.
4. Freeman, G. J., *et al.* 1992. *J. Immunol.* 149:3795.

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