invitrogen™ | MOLECULAR PROBES®

PRODUCT INSERT

MONOCLONAL ANTIBODY TO THE MOUSE CD45RC ANTIGEN

Product	Form	Volume	Antibody*	Excitation (nm)	Peak Emission (nm)	Matching Isotype Controls	
RMCD45RC01	FITC	1.0 ml	500 µg	488	525	Rat IgG2a FITC	R2a01
RMCD45RC04	R-PE	1.0 ml	100 µg	488	575	Rat IgG2a R-PE	R2a04

PRODUCT DESCRIPTION

Rat monoclonal antibody to the mouse CD45RC antigen

Clone: C455.1F

Isotype: Rat $IgG_{2a}\kappa$

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.

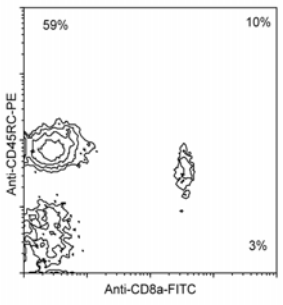
Stabilizer: Sucrose.

PRODUCT CHARACTERIZATION

Antigen Specificity: The CD45 family of cell-surface glycoprotein antigens exist as a set of isoforms. The patterns of monoclonal antibody recognition of the CD45 phenotypes can be restricted (CD45RA, RB and RC), or broader, such as the CD45 T-200 species (see also product no. 1660). The "restricted" subsets of this group arise as a result of translation of alternatively spliced mRNAs from exons A, B and C (exons 4, 5 and 6), where exons 3-15 encode the extracellular domain of the CD45 molecule. The restricted epitopes are differentially expressed on T and B lymphocytes, including functionally distinct T cells.[1-4]

Research Applications:

- Identification and enumeration of $CD45RC^+$ cells by flow cytometry
- Immunoprecipitation



Cells from BALB/c spleen were double stained with rat anti-CD45RC-R-PE and rat anti-mouse CD8a-FITC, following which small lymphocytes were gated and analyzed on a FACScan™ flow cytometer (BDIS, San Jose, CA).

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 10^6 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. Hathcock, K.S., Laslo, G., Dickler, H.B.., Sharrow, S.O.,. Johnson, P. Trowbridge, I.S. and Hodes, R.J. 1992. *Immunol*. 148:19.
2. Bottomly, K., M. Luqman, L. Greenbaum, S. Carding, J. West, T. Pasqualini, and D.B. Murphy. 1989. *Eur. J. Immunol*. 19:617.
3. Johnson, P., L. Greenbaum, K. Bottomly, *et al*. 1989. *J. Exp. Med*. 169:1179.
4. Birkeland, M.L., *et al.* 1988. *J. Mol. Cell. Immunol*. 4:71.

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