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# **MOLECULAR PROBES®**

#### PRODUCT INSERT MONOCLONAL ANTIBODIES TO THE HUMAN CD8 ANTIGEN

| Product Code | Form                             | Volume | Antibody* | Tests    | Excitation<br>(nm) | Peak<br>Emission<br>(nm) |
|--------------|----------------------------------|--------|-----------|----------|--------------------|--------------------------|
| MHCD0800     | Purified                         | 0.5 ml | 100 µg    |          | N/A                | N/A                      |
| MHCD0800-4   | Purified                         | 2.0 ml | 400 µg    |          |                    |                          |
| MHCD0815     | Biotin                           | 0.5 ml |           | 100 min. | N/A                | N/A                      |
| MHCD0815-4   | Biotin                           | 2.0 ml |           | 400 min. |                    |                          |
| MHCD0830     | Pacific Orange <sup>™</sup>      | 0.5 ml |           | 100 min  | 405                | 551                      |
| MHCD0820     | Alexa Fluor <sup>®</sup> 488     | 0.5 ml |           | 100 min. | 488                | 519                      |
| MHCD0817     | $PE-TR^{\dagger}$                | 0.5 ml |           | 100 min. | 488                | 615                      |
| MHCD0822     | PE-Alexa Fluor <sup>®</sup> 610  | 0.5 ml |           | 100 min. | 488                | 628                      |
| MHCD0806     | TC <sup>‡</sup>                  | 0.5 ml |           | 100 min. | 488                | 670                      |
| MHCD0806-5   | TC                               | 2.5 ml |           | 500 min. |                    |                          |
| MHCD0831     | PerCP <sup>††</sup>              | 0.5ml  |           | 100 min. | 488                | 678                      |
| MHCD0818     | PE-Cy <sup>®</sup> 5.5           | 0.5 ml |           | 100 min. | 488                | 694                      |
| MHCD0824     | PE-Alexa Fluor <sup>®</sup> 700  | 0.5 ml |           | 100 min. | 488                | 723                      |
| MHCD0812     | PE-Cy <sup>®</sup> 7             | 0.5 ml |           | 100 min. | 488                | 767                      |
| MHCD0805     | APC                              | 0.5 ml |           | 100 min. | 600-650            | 660                      |
| MHCD0819     | APC-Cy <sup>®</sup> 5.5          | 0.5 ml |           | 100 min. | 600-650            | 694                      |
| MHCD0814     | APC-Cy®7                         | 0.5 ml |           | 100 min. | 600-650            |                          |
| MHCD0827     | APC-Alexa Fluor <sup>®</sup> 750 | 0.5 ml |           | 100 min. | 600-650            |                          |
| MHCD0829     | Alexa Fluor <sup>®</sup> 700     | 0.5 ml |           | 100 min. | 630-702            |                          |

For information on IVDP (FITC and R-PE) or RUO formats of this clone, visit our website at www.invitrogen.com

#### PRODUCT DESCRIPTION

Mouse monoclonal antibody to the human CD8 antigen

Clone: 3B5

Isotype: Mouse IgG2a

Lot No.: See label Expiration: See label

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

**Preservative:** 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:** For conjugated products only, a highly purified grade of BSA has been added as a stabilizing agent.

#### **STORAGE & HANDLING**

Store reagents at 2-8°C. Light exposure should be avoided with 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 CHARACTERIZATION

**Antigen Specificity:** According to the literature this antibody recognizes the CD8 antigen also known as T8 and Lyt2,3<sup>1</sup>. This antibody recognizes the  $\alpha$  chain alone as well as the  $\alpha\beta$  heterodimer. CD8 serves as a co-receptor during T cell activation through the binding of MHC Class I molecules. CD8 is expressed on thymocytes subsets and cytotoxic T cells.

Leukocyte Workshop Status: Leukocyte Typing V

#### PRODUCT QUALITY CONTROL

Each lot is tested by flow cytometry using human peripheral blood leukocytes (PBL). This testing was performed using 5  $\mu$ l of antibody per 1 x 10<sup>6</sup> cells in a 100  $\mu$ l staining volume. Because conditions may vary, it is recommended that each investigator determine the optimal amount of antibody to be used for each application. See reverse for representative flow cytometry data.

#### **REFERENCES:**

- Schlossman, S. F., L. Boumsell, W. Gilks, J. M. Harlan, T. Kishimoto, C. Morimoto, J. Ritz, S. Shaw, R. Silverstein, T. Springer, T. F. Tedder and R. F. Todd eds. 1995. Leukocyte Typing V. Oxford University Press Inc., New York.
- \* Antibody value assigned is based on the Optical Density at 280 nm.
- <sup>†</sup> TR, Texas Red<sup>®</sup>
- TC, TRI-COLOR<sup>®</sup>, PE-Cy<sup>®</sup>5

The efficiency of energy transfer in tandem dyes can be significantly decreased by exposure to visible light. We recommend that longer wavelength fluorochrome conjugates, e.g. PE-Cy<sup>®</sup>7, PE-Alexa Fluor<sup>®</sup> 700, be protected from light during staining and while awaiting analysis, e.g. cover with aluminum foil.

The Texas Red<sup>®</sup>, Alexa Fluor<sup>®</sup> and Pacific Blue<sup>®</sup> dye conjugates in this product are sold under license from Molecular Probes, Inc., for research use only or as analyte specific reagents, except for use in combination with microarrays or high content screening and are covered by pending and issued patents.

Cy® is a trademark of GE/Amersham Biosciences.

PerCP contained in this product is protected by patents owned by Becton, Dickinson & Company (European patent 0314406, or Japanese Patent JP1888759). This product will not be sold or shipped to customers in France, Germany, Italy, United Kingdom or Japan until the pertinent patents are no longer in effect (October 21, 2008).

(Rev 10/09) DCC-09-1471

### ANALYTE SPECIFIC REAGENT. ANALYTICAL AND PERFORMANCE CHARACTERISTICS ARE NOT ESTABLISHED.

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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 Note: 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.

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