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PRODUCT INSERT

MONOCLONAL ANTIBODIES TO THE HUMAN CD3 ANTIGEN

CE

Product Code	Form	Volume	Antibody*	Tests	Excitation (nm)	Peak Emission (nm)
MHCD0300	Purified	0.5 ml	100 µg		N/A	N/A
MHCD0300-4	Purified	2.0 ml	400 µg			
MHCD0315	Biotin	0.5 ml		100 min.	N/A	N/A
MHCD0315-4	Biotin	2.0 ml		400 min.		
MHCD0328	Pacific Blue™	0.5 ml		100 min.	405	455
MHCD0320	Alexa Fluor® 488	0.5 ml		100 min.	488	519
MHCD0317	PE-TR†	0.5 ml		100 min.	488	615
MHCD0322	PE-Alexa Fluor® 610	0.5 ml		100 min.	488	628
MHCD0331	PerCP††	0.5ml		100 min.	488	678
MHCD0318	PE-Cy®5.5‡	0.5 ml		100 min.	488	694
MHCD0324	PE-Alexa Fluor® 700	0.5 ml		100 min.	488	723
MHCD0312	PE-Cy®7	0.5 ml		100 min.	488	767
MHCD0305	APC	0.5 ml		100 min.	600-650	660
MHCD0319	APC-Cy®5.5	0.5 ml		100 min.	600-650	694
MHCD0327	APC-Alexa Fluor® 750	0.5 ml		100 min.	600-650	775

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

PRODUCT DESCRIPTION

Mouse monoclonal antibody to the human CD3 antigen

Clone: S4.1 (also known as 7D6)

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 antibodies. 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 CD3 antigen[1]. CD3 is comprised of 5 individual proteins that are responsible for T cell receptor expression and signaling. CD3 is expressed on thymocytes, T cells and some NK 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 µl of antibody per 1 x 10^6 cells in a 100 µl of 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:

1. 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.
2. Reinherz, E. L., S. C. Meuer, K. A. Fitzgerald, R. E. Hussey, H. Levine, and S. F. Schlossman. 1982. *Cell* 30: 715.
3. Borst, J., S. Alexander, J. Elder, and C. Terhorst. 1983. *J. Biol. Chem.* 258: 5135.
4. Meuer, S. C., O. Acuto, K. A. Fitzgerald, R. E. Hussey, J. C. Hodgdon, S. F. Schlossman, and E. L. Reinherz. 1983. *Nature* 303: 808.
5. Meuer, S. C., K. A. Fitzgerald, R. E. Hussey, J. C. Hodgdon, S. F. Schlossman, and E. L. Reinherz. 1983. *J. Exp. Med.* 157: 705.
6. Van den Elsen, P., B. Shepley, J. Borst, J. E. Coligan, A. F. Markham, S. Orkin, and C. Terhorst. 1984. *Nature* 312: 413.
7. Furley, A. J., S. Mizutani, K. Weilbaecher, H. S. Dhailiwal, A. M. Ford, L. C. Chan, H. V. Molgaard, B. Toyonaga, T. Mak, P. van den Elsen, D. Gold, C. Terhorst, and M. F. Greaves. 1986. *Cell* 46: 75.
8. Gold, D. P., J. M. Puck, C. L. Petty, M. Cho, J. Coligan, J. Woody, and C. Terhorst. 1986. *Nature* 321: 4.
9. Oettgen, H. C., and C. Terhorst. 1987. *Hum. Immunol.* 18: 187.
10. Clevers, H., B. Alarcon, T. Wileman, and C. Terhorst. 1988. *Ann. Rev. Immunol.* 6: 629.

* Antibody value assigned is based on the Optical Density at 280 nm.

† TR, Texas Red®

‡ TC, TRI-COLOR®, PE-Cy®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®7, PE-Alexa Fluor® 700, be protected from light during staining and while awaiting analysis, e.g. cover with aluminum foil.

The Texas Red®, Alexa Fluor® and Pacific Blue® 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

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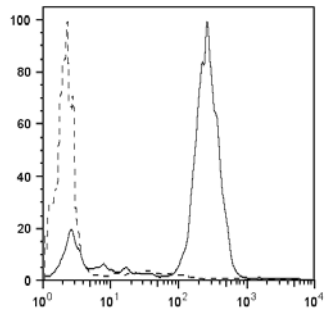
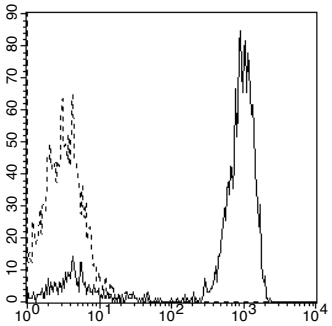


Human CD3 Pacific Blue®



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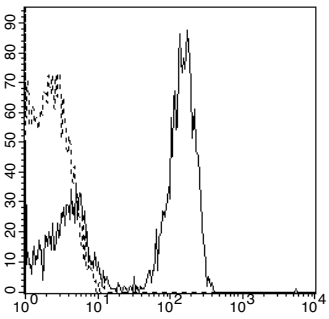

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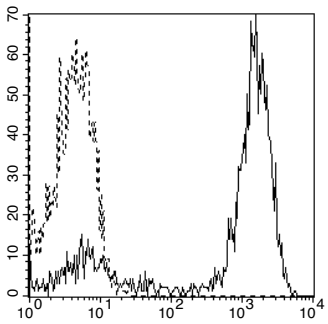

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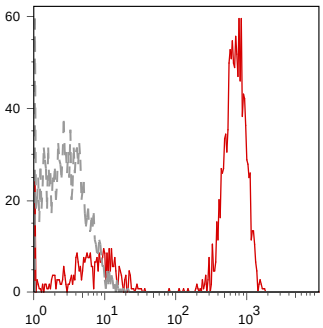
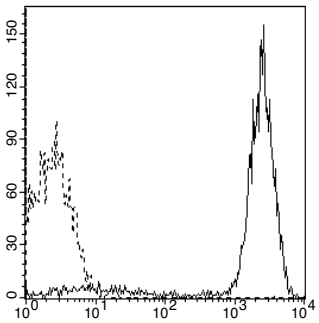


Human CD3 PerCP



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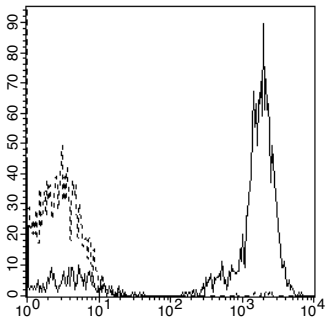

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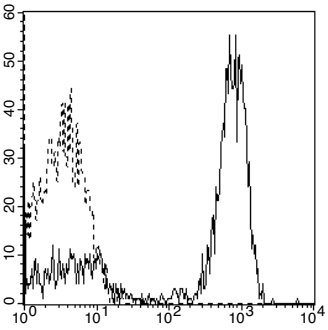
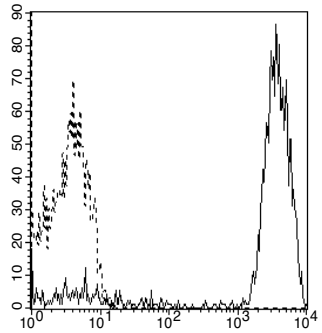
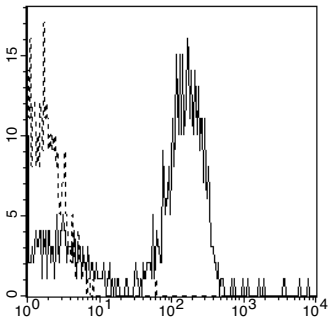


Human CD3 PE-Cy®7



Human CD3 APC



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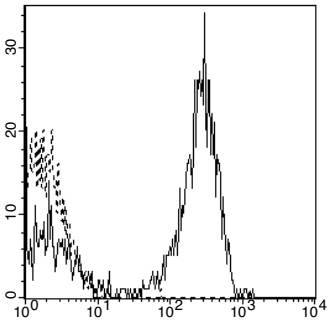

Human CD3 APC-Alexa Fluor 750

Log fluorescence intensity profiles of human peripheral blood lymphoCytes analyzed on a FACSCalibur™, FACScan™, or FACS Vantage™ flow ®tometer, and analyzed using CellQuest™ software, BD Biosciences, San Jose, CA.

Negative control profiles represent unstained cells or cells incubated with an isotype control antibody.

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.

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