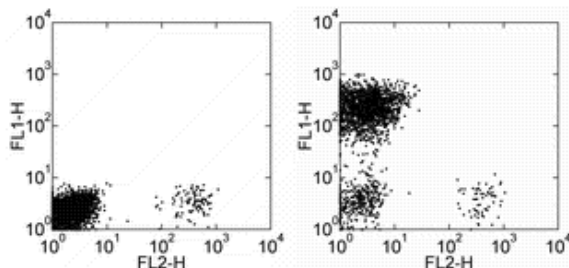


Anti-Human CD3 Alexa Fluor[®] 488

Catalog Number: 53-0037

Also Known As: Leu-4, T3

RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of normal human peripheral blood cells with Anti-Human CD19 PE (cat. 12-0199) and staining buffer (autofluorescence) (left) or Anti-Human CD3 Alexa Fluor[®] 488 (right). Cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Human CD3 Alexa Fluor[®] 488

REF **Catalog Number:** 53-0037


Clone: OKT3

Concentration: 5 uL (1.0 ug)/test

Host/Isotype: Mouse IgG2a, kappa

HLDA Workshop: VI T6T-R3

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

 **Temperature Limitation:** Store at 2-8°C. Do not freeze. Light sensitive material.

 **Batch Code:** Refer to Vial

 **Use By:** Refer to Vial

 **Caution, contains Azide**

Description

The OKT3 monoclonal antibody reacts with an epitope on the epsilon-subunit within the human CD3 complex. The OKT3 antibody has been reported to have potent immunosuppressive properties in vivo and has been proven effective in the treatment of renal, heart and liver allograft rejection. The CD3 subunits, gamma, delta, and epsilon chains, are required for proper assembly, trafficking and surface expression of the TCR complex. CD3 is expressed by thymocytes in a developmentally regulated manner and by all mature T cells. Crosslinking of TCR initiates an intracellular biochemical pathway resulting in cellular activation and proliferation.

Applications Reported

This OKT3 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This OKT3 antibody has been pre-titrated and tested by flow cytometric analysis of human peripheral blood leukocytes. This can be used at 5 µL (1.0 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test.

References

Tanaka Y, Koyanagi Y, Tanaka R, Kumazawa Y, Nishimura T, Yamamoto N. Productive and lytic infection of human CD4+ type 1 helper T cells with macrophage-tropic human immunodeficiency virus type 1. *J Virol.* 1997 Jan;71(1):465-70.

Hutchcroft JE, Tsai B, Bierer BE. Differential phosphorylation of the T lymphocyte costimulatory receptor CD28. *J Biol Chem.* 1996 Jun 7;271(23):13362-70.

Adair JR, Athwal DS, Bodmer MW, Bright SM, Collins AM, Pulito VL, Rao PE, Reedman R, Rothermel AL, Xu D, et al. Humanization of the murine anti-human CD3 monoclonal antibody OKT3. *Hum Antibodies Hybridomas.* 1994;5(1-2):41-7.

Kung PC and Goldstein G. Complement-fixing monoclonal antibody to human T cells, and methods of preparing same. U.S. Pat. 4,361,549 dated Nov. 30, 1982.

Hoffman RA, Kung PC, Hansen WP, Goldstein G. Simple and rapid measurement of human T lymphocytes and their subclasses in peripheral blood. *Proc Natl Acad Sci U S A.* 1980 Aug;77(8):4914-7.

Related Products

12-0199 Anti-Human CD19 PE (HIB19)

53-4724 Mouse IgG2a K Isotype Control Alexa Fluor® 488

Legal

Alexa Fluor® and Pacific Blue® are registered trademarks of and licensed under patents assigned to Molecular Probes, Inc. for research use only. This product is subject to an agreement between Molecular Probes, Inc. and eBioscience, and the manufacture, use, sale or import of this product may be subject to one or more U.S. patents, pending applications and corresponding foreign equivalents, owned by Molecular Probes, Inc. (a wholly owned subsidiary of Invitrogen Corp). The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product for life science research or as an ASR. The buyer cannot use this product for manufacturing or for any other screening (specifically including use in combination with microarrays or High Content Screening) or testing purpose, other than as an ASR. For information on purchasing a license to this product for purposes other than life science research or use as an ASR, contact Molecular Probes, Inc.

Not for further distribution without written consent.

Copyright © 2000-2010 eBioscience, Inc.

Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.eBioscience.com • info@eBioscience.com