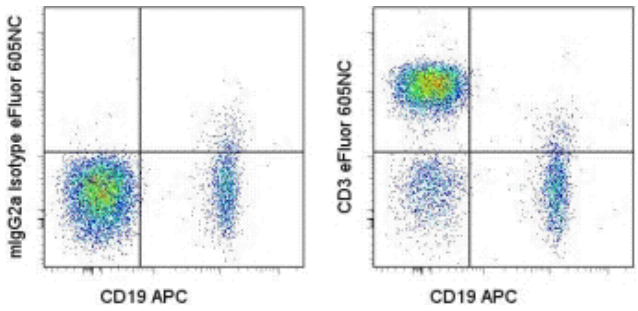
Anti-Human CD3 eFluor® 605NC

Catalog Number: 93-0037
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 APC (cat. 17-0199) and Mouse IgG2a K Isotype Control eFluor® 605NC (cat. 93-4724) (left) or Anti-Human CD3 eFluor® 605NC (right). Cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Human CD3 eFluor® 605NC
REF **Catalog Number:** 93-0037
Clone: OKT3
Concentration: 5 uL
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. Light sensitive material. This product is guaranteed for 6 months upon receipt when stored properly.
LOT **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 normal human peripheral blood cells. This can be used at 5 µL per test. A test is defined as the amount 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 10^5 to 10^8 cells/test.

The isotype control eFluor^{TM} 605^{NC} mouse IgG2a (cat. 93-4724) should be used at 5µL/test.

Laser/Filter Recommendation: When using eFluor 605NC, we recommend excitation with the 405nm violet laser with an appropriate filter set, such as the 595LP dichroic mirror with the 605/40 bandpass filter. An acceptable alternative is the 610/20 bandpass filter. For instruments not equipped with a violet laser, the eFluor 605NC is also excited by the 488 nm blue laser and can be used as a PE-Texas Red alternative.

Fixation Recommendation: When fixing samples that have been stained with nanocrystal reagents, we recommend keeping the total volume at approximately 200 µL of IC Fixation Buffer (cat. 00-8222) and the exposure time 30-60 minutes to preserve the optimal fluorescent signal from the nanocrystal reagent.

For answers about fixation and other questions, please refer to Nanocrystal Frequently Asked Questions or contact eBioscience Technical Support.

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
00-4222 Flow Cytometry Staining Buffer
17-0199 Anti-Human CD19 APC (HIB19)
93-4724 Mouse IgG2a K Isotype Control eFluor® 605NC

Legal
Under patent number: US 7,939,170 and additional pending patent application(s)

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