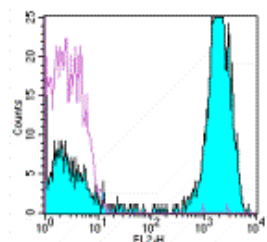


## Anti-Human CD3 PE

**Catalog Number:** 12-0037

**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 Mouse IgG2a K Isotype Control PE (cat. 12-4724) (open histogram) or Anti-Human CD3 PE (filled histogram). Cells in the lymphocyte gate were analyzed.

### Product Information

**Contents:** Anti-Human CD3 PE

**REF** **Catalog Number:** 12-0037

**Clone:** OKT3

**Concentration:** 5  $\mu$ L (0.5  $\mu$ g)/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

The 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  $\mu$ L (0.5  $\mu$ g) per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from  $10^5$  to  $10^8$  cells/test.

### References

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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

12-4724 Mouse IgG2a K Isotype Control PE

45-0199 Anti-Human CD19 PerCP-Cy5.5 (HIB19)  
48-0047 Anti-Human CD4 eFluor® 450 (SK3 (SK-3))

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