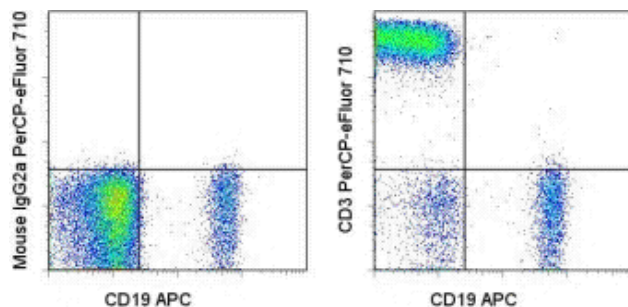


## Anti-Human CD3 PerCP-eFluor® 710

**Catalog Number:** 46-0037

**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 PerCP-eFluor® 710 (cat. 46-4724) (left) or Anti-Human CD3 PerCP-eFluor® 710 (right). Cells in the lymphocyte gate were used for analysis.

### Product Information

**Contents:** Anti-Human CD3 PerCP-eFluor® 710

**REF** **Catalog Number:** 46-0037

**Clone:** OKT3

**Concentration:** 5 µL (0.06 µg)/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.

**LOT** **Batch Code:** Refer to Vial

**Use By:** Refer to Vial

**Contains sodium 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 (0.06 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 10<sup>5</sup> to 10<sup>8</sup> cells/test.

**PerCP-eFluor® 710 can be used in place of PE-Cy5, PE-Cy5.5 or PerCP-Cy5.5. PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm). Please make sure that your instrument is capable of detecting this fluorochrome. For a filter configuration, we recommend using the 685 LP dichroic mirror and 710/40 band pass filter, however the 695/40 band pass filter is an acceptable alternative.**

**Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.**

### 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

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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**

11-0199 Anti-Human CD19 FITC (HIB19)

17-0199 Anti-Human CD19 APC (HIB19)

46-4724 Mouse IgG2a K Isotype Control PerCP-eFluor® 710

47-0088 Anti-Human CD8a APC-eFluor® 780 (RPA-T8)

48-0049 Anti-Human CD4 eFluor® 450 (RPA-T4)

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