

# CD3 Monoclonal Antibody (OKT3), APC, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Nematode, Human
Host/Isotype	Mouse / IgG2a, kappa
Recommended Isotype Control	Mouse IgG2a kappa Isotype Control (eBM2a), APC, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	OKT3
Conjugate	APC
Excitation/Emission Max	651/660 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4°C, store in dark, DO NOT FREEZE!
RRID	AB_1907372

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.06 µg)/test	39 Publications
Functional Assay (Functional)	-	1 Publication

## Product Specific Information

**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.

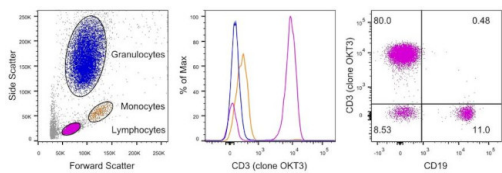
**Applications Tested:** This OKT3 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.06 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test.

**Excitation:** 633-647 nm; **Emission:** 660 nm; **Laser:** Red Laser.

**Filtration:** 0.2 µm post-manufacturing filtered.

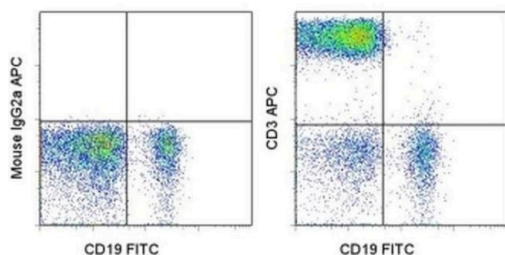
**CD3 Antibody (17-0037-42)**

Staining of human peripheral blood cells. As expected based on known relative expression patterns, CD3 clone OKT3 stains a subset of lymphocytes (T cells) and does not stain monocytes and granulocytes (middle plot). Additional analysis of lymphocytes shows that CD3 clone OKT3 does not stain any CD19+ B cells (right plot). Details: Normal human whole blood was surface stained with CD3 (clone OKT3) and CD19 (clone HIB19). After staining, red blood cells were lysed using 1-step Fix/Lyse Buffer. Cells in the lymphocyte (purple histogram), monocyte (orange histogram), or granulocyte (blue histogram) gates were used to compare CD3 staining (middle plot). Cells in the lymphocyte gate were used to compare CD3 and CD19 staining (right plot). {RE}



**CD3 Antibody (17-0037-42) in Flow**

Staining of normal human peripheral blood cells with Anti-Human CD19 FITC (Product # 11-0199-42) and Mouse IgG2a K Isotype Control APC (Product # 17-4724-81) (left) or Anti-Human CD3 APC (right). Cells in the lymphocyte gate were used for analysis.



View more figures on [thermofisher.cn](http://thermofisher.cn)

## 40 References

### Flow Cytometry (39)

#### Cell death & disease

#### **Tumour cell apoptosis modulates the colorectal cancer immune microenvironment via interleukin-8-dependent neutrophil recruitment.**

"17-0037-42 was used in Flow Cytometry to investigate the impact of apoptotic colorectal cancer cells on neutrophils and its consequence on other immune cells of the tumour microenvironment."

Authors: Schimek V, Strasser K, Beer A, Göber S, Walterskirchen N, Brostjan C, Müller C, Bachleitner-Hofmann T, Bergmann M, Dolznig H, Oehler R

Year  
2022

Species  
Human

#### The Journal of experimental medicine

#### **Broad and potent neutralizing human antibodies to tick-borne flaviviruses protect mice from disease.**

"Published figure using CD3 monoclonal antibody (Product # 17-0037-42) in Flow Cytometry"

Authors: Agudelo M, Palus M, Keeffe JR, Bianchini F, Svoboda P, Salát J, Peace A, Gazumyan A, Cipolla M, Kapoor T, Guidetti F, Yao KH, Elsterová J, Teislerová D, Chrdle A, Hönl V, Oliveira T, West AP, Lee YE, Rice CM, MacDonald MR, Bjorkman PJ, Ržek D, Robbiani DF, Nussenzweig MC

Year  
2021

[View more Flow references on thermofisher.cn](#)

### Functional Assay (1)

#### PloS one

#### **Increased frequency of CD4 and CD8 regulatory T cells in individuals under 15 years with multibacillary leprosy.**

"17-0037 was used in Functional assays to investigate the role of Tregs in leprosy in individuals under 15 years old."

Authors: Fernandes C, Gonçalves HS, Cabral PB, Pinto HC, Pinto MI, Câmara LM

Year  
2014

Species  
Human

### More applications with references on thermofisher.cn

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