

CD3 Monoclonal Antibody (OKT3), PE, eBioscience™

Product Details	
Size	25 Tests
Species Reactivity	Human
Published Species	Human, Mouse
Host/Isotype	Mouse / IgG2a, kappa
Recommended Isotype Control	Mouse IgG2a kappa Isotype Control (eBM2a), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	OKT3
Conjugate	PE
Excitation/Emission Max	565/576 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_1272148

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.5 µg)/test	33 Publications
Miscellaneous PubMed (Misc)	-	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: The OKT3 antibody has been reported for use in flow cytometric analysis.

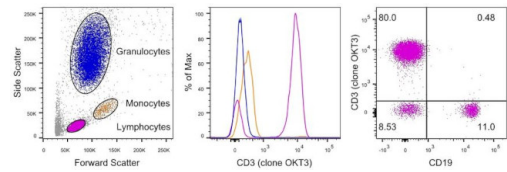
Applications Tested: This OKT3 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.5 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells /test.

Excitation: 488-561 nm; **Emission:** 578 nm; **Laser:** Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

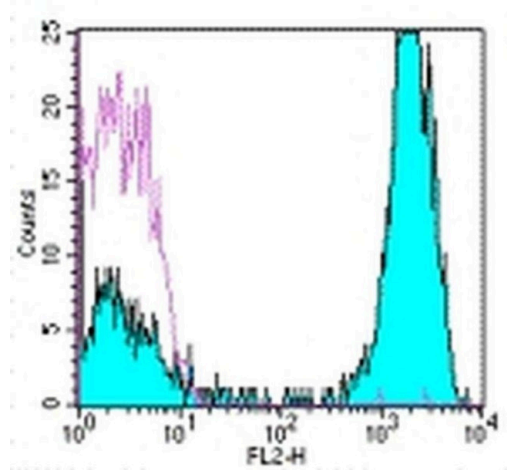
CD3 Antibody (12-0037-41)

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 (12-0037-41) in Flow

Staining of normal human peripheral blood cells with Mouse IgG2a K Isotype Control PE (Product # 12-4724-81) (open histogram) or Anti-Human CD3 PE (filled histogram). Cells in the lymphocyte gate were analyzed.



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Flow Cytometry (33)

Cells

The Composition of Adipose-Derived Regenerative Cells Isolated from Lipoaspirate Using a Point of Care System Does Not Depend on the Subject's Individual Age, Sex, Body Mass Index and Ethnicity.

"12-0037-42 was used in Flow cytometry/Cell sorting to show that key characteristics of unmodified, autologous, adipose-derived regenerative cells (UA-ADRCs) can be independent of the subject's age, sex, BMI and ethnicity."

Authors: Schmitz C,Alt C,Azares AR,Pearce DA,Facile TR,Furia JP,Maffulli N,Huang C,Alt EU

Year
2022

Species
Human

British journal of cancer

Changes in circulating exosome molecular profiles following surgery/ (chemo)radiotherapy: early detection of response in head and neck cancer patients.

"12-0037-42 was used in Flow Cytometry to examine circulating exosomes as early detectors of treatment success in a cohort of head and neck cancer patients."

Authors: Theodoraki MN,Laban S,Jackson EK,Lotfi R,Schuler PJ,Brunner C,Hoffmann TK,Whiteside TL,Hofmann L

Year
2021

Species
Human

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

Miscellaneous PubMed (1)

The Journal of biological chemistry

Lateral compartmentalization of T cell receptor versus CD45 by galectin-N-glycan binding and microfilaments coordinate basal and activation signaling.

"12-0037 was used in Flow cytometry/Cell sorting to investigate the role of the galectin lattice and actin cytoskeleton in controlling microdomain structure and coordinating signal transduction across the plasma membrane."

Authors: Chen IJ,Chen HL,Demetriou M

Year
2007

Species
Human
Mouse

More applications with references on thermofisher.com

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