

CD3 Monoclonal Antibody (OKT3), Biotin, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Human
Published Species	Human
Host/Isotope	Mouse / IgG2a, kappa
Recommended Isotype Control	Mouse IgG2a kappa Isotype Control (eBM2a), Biotin, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	OKT3
Conjugate	Biotin
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage Conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_1234955

Applications	Tested	Dilution	Published
Flow Cytometry (Flow)	✓	0.06 µg/test	12 Publications
Immunomicroscopy (IM)	-		1 Publication
Immunofluorescence (IF)	-		2 Publications
Functional Assay (FN)	-		2 Publications
Western Blot (WB)	-		1 Publication
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: This OKT3 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This OKT3 antibody has been tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at less than or equal to 0.06 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in

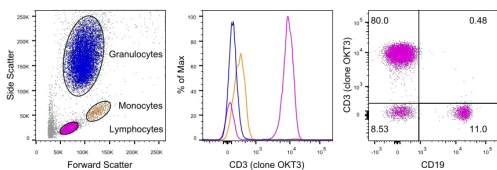
a final volume of 100 μ L. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Filtration: 0.2 μ m post-manufacturing filtered.

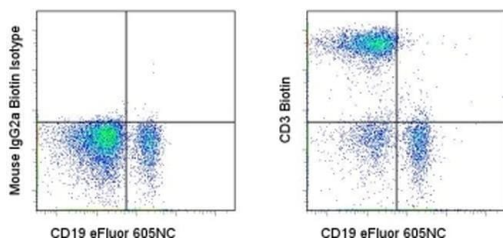
Advanced Verification Data

CD3 Antibody (13-0037-82)

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). Relative expression validation info.



Product Images For CD3 Monoclonal Antibody (OKT3), Biotin, eBioscience™



CD3 Antibody (13-0037-82) in Flow

Staining of normal human peripheral blood cells with Anti-Human CD19 eFluor® 605 and 0.03 μ g of Biotin Mouse IgG2a K Isotype Control (Product # 13-4724-85) (left) or 0.03 μ g of Anti-Human CD3 FITC (right) followed by Streptavidin PE (Product # 12-4317-87). Total viable cells were used for analysis.

View more figures on thermofisher.com

19 References

Flow Cytometry (12)

Stem cells international

Umbilical Cord-Derived Mesenchymal Stem Cells Suppress Autophagy of T Cells in Patients with Systemic Lupus Erythematosus via Transfer of Mitochondria.

"Published figure using CD3 monoclonal antibody (Product # 13-0037-82) in Flow Cytometry"

Authors: Chen J,Wang Q,Feng X,Zhang Z,Geng L,Xu T,Wang D,Sun L

Species
Not Applicable

Dilution
Not Cited

Year
2018

Oncoimmunology

CD1b-autoreactive T cells recognize phospholipid antigens and contribute to antitumor immunity against a CD1b⁺ T cell lymphoma.

Authors: Bagchi S,Li S,Wang CR

Species
Human

Dilution
Not Cited

Year
2018

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Immunomicroscopy (1)

Molecular biology of the cell

T-lymphocyte passive deformation is controlled by unfolding of membrane surface reservoirs.

"Published figure using CD3 monoclonal antibody (Product # 13-0037-82) in Immunomicroscopy"

Authors: Guillou L,Babataheri A,Saitakis M,Bohineust A,Dogniaux S,Hivroz C,Barakat AI,Husson J

Species
Not Applicable

Dilution
Not Cited

Year
2016

Immunofluorescence (2)

Proceedings of the National Academy of Sciences of the United States of America

Functional role of T-cell receptor nanoclusters in signal initiation and antigen discrimination.

"Published figure using CD3 monoclonal antibody (Product # 13-0037-82) in Immunofluorescence"

Authors: Pagon SV,Tabarin T,Yamamoto Y,Ma Y,Nicovich PR,Bridgeman JS,Cohnen A,Benzing C,Gao Y,Crowther MD,Tungatt K,Dolton G,Sewell AK,Price DA,Acuto O,Parton RG,Gooding JJ,Rossy J,Rossjohn J,Gaus K

Species
Not Applicable

Dilution
Not Cited

Year
2016

More applications with references on thermofisher.com

FN (2)

WB (1)

MISC (1)

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