

CD3 Monoclonal Antibody (OKT3), Functional Grade, eBioscience™

Product Details	
Size	50 µg
Species Reactivity	Human
Published Species	Fruit fly, Human, Mouse
Host/Isotype	Mouse / IgG2a, kappa
Recommended Isotype Control	Mouse IgG2a kappa Isotype Control (eBM2a), Functional Grade, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	OKT3
Conjugate	Functional Grade
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography
Storage buffer	TBS, pH 8.0
Contains	no preservative
Storage conditions	4°C
RRID	AB_468854

Applications	Tested Dilution	Publications
Western Blot (WB)	-	4 Publications
Immunohistochemistry (IHC)	-	2 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	1 Publication
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	0.25 µg/test	81 Publications
ELISA (ELISA)	-	4 Publications
Neutralization (Neu)	-	1 Publication
Functional Assay (Functional)	Assay-Dependent	97 Publications
T-Cell Activation (TCA)	-	6 Publications
Affinity Purification (AP)	-	4 Publications
In vitro Assay (IV)	-	7 Publications
Miscellaneous PubMed (Misc)	-	12 Publications

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. OKT3 has also been reported for in vitro activation of T cells.

Applications Tested: The 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 0.25 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. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Storage and handling: Use in a sterile environment.

Filtration: 0.2 µm post-manufacturing filtered.

Purity: Greater than 90%, as determined by SDS-PAGE.

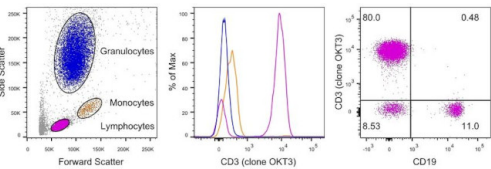
Endotoxin Level: Less than 0.001 ng/µg antibody, as determined by LAL assay.

Aggregation: Less than 10%, as determined by HPLC.

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

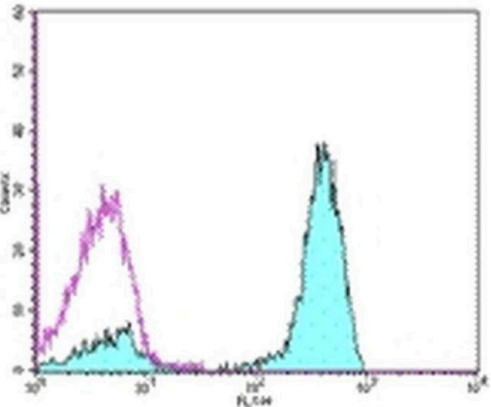
CD3 Antibody (16-0037-81)

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 (16-0037-81) in Flow

Staining of normal human peripheral blood cells with 0.125 µg of Mouse IgG2a K Isotype Control Purified (Product # 16-4724-85) (open histogram) or Anti-Human CD3 Functional Grade Purified (filled histogram) followed by Anti-Mouse IgG FITC (Product # 11-4011-85). Cells in the lymphocyte gate were used for analysis.



Western Blot (4)

<p>Frontiers in immunology</p> <p>Oxidation of HMGB1 Is a Dynamically Regulated Process in Physiological and Pathological Conditions.</p> <p>"16-0037 was used in Western Blotting to analyze the expression of HMGB1 redox isoforms in different inflammatory conditions in skeletal muscle."</p> <p>Authors: Ferrara M,Chialli G,Ferreira LM,Ruggieri E,Careccia G,Preti A,Piccirillo R,Bianchi ME,Sitia G,Venereau E</p>	<p>Year 2021</p> <p>Species Human</p>
<p>Journal of clinical immunology</p> <p>A Nonsense N -Terminus NFKB2 Mutation Leading to Haploinsufficiency in a Patient with a Predominantly Antibody Deficiency.</p> <p>"16-0037 was used in Western Blotting to demonstrate that bona fide NFKB2 haploinsufficiency is associated with clinical immunodeficiency."</p> <p>Authors: Kuehn HS,Bernasconi A,Niemela JE,Almejun MB,Gallego WAF,Goel S,Stoddard JL,Sánchez RGP,Franco CAA,Oleastro M,Grunebaum E,Ballas Z,Cunningham-Rundles C,Fleisher TA,Franco JL,Danielian S,Rosenzweig SD</p>	<p>Year 2020</p> <p>Species Human</p>

View more WB references on thermofisher.cn

Immunohistochemistry (2)

<p>Cell reports</p> <p>Mesenchymal Stem and Stromal Cells Harness Macrophage-Derived Amphiregulin to Maintain Tissue Homeostasis.</p> <p>"16-0037-81 was used in Immunohistochemistry to demonstrate the role of mesenchymal stem and stromal cell and macrophage cross-talk in post-injury tissue homeostasis in mice."</p> <p>Authors: Ko JH,Kim HJ,Jeong HJ,Lee HJ,Oh JY</p>	<p>Year 2020</p> <p>Species Mouse</p>
<p>European journal of immunology</p> <p>Dichotomy between factors inducing the immunosuppressive enzyme IL-4-induced gene 1 (IL4I1) in B lymphocytes and mononuclear phagocytes.</p> <p>"16-0037 was used in Immunohistochemistry to investigate the production and function of the phenylalanine catabolising enzyme, IL-4-induced gene 1."</p> <p>Authors: Marquet J,Lasoudris F,Cousin C,Puiffe ML,Martin-Garcia N,Baud V,Chereau F,Farcet JP,Molinier-Frenkel V, Castellano F</p>	<p>Year 2010</p> <p>Species Human</p>

More applications with references on thermofisher.cn

- IHC (P) (1)
- ICC/IF (1)
- Flow (81)
- ELISA (4)
- Neu (1)
- Functional (97)
- TCA (6)
- AP (4)
- IV (7)
- Misc (12)

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