CD3 Monoclonal Antibody (UCHT1), APC, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Rat, Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), APC, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	UCHT1
Conjugate	APC
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin, 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_10805861

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Flow Cytometry (Flow)	5 µL (0.25 µg)/test	31 Publications

Product Specific Information

Description: The UCHT1 monoclonal antibody reacts with human CD3e, a 20 kDa subunit of the TCR complex. Along with the other CD3 subunits gamma and delta, the epsilon chain is 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 via immobilized UCHT1 initiates an intracellular biochemical pathway resulting in cellular activation and proliferation.

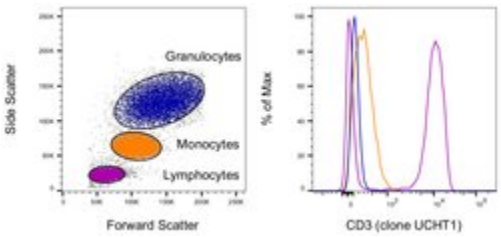
Applications Reported: The UCHT1 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This UCHT1 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.25 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 10^5 to 10^8 cells/test.

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

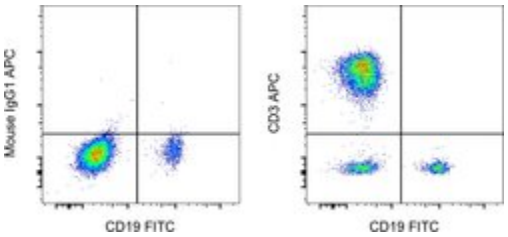
Filtration: 0.2 µm post-manufacturing filtered.

Advanced Verification Data



CD3 Antibody (17-0038-42)
Staining of human peripheral blood cells. As expected based on known relative expression patterns, CD3 clone UCHT1 stains a subset of lymphocytes (T cells) and does not stain monocytes and granulocytes. Details: Normal human whole blood was surface stained with CD3 (clone UCHT1). 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 for analysis. Relative expression validation info.

Product Images For CD3 Monoclonal Antibody (UCHT1), APC, eBioscience™



CD3 Antibody (17-0038-42) in Flow
Normal human peripheral blood cells were stained with CD19 Monoclonal Antibody, FITC (Product # 11-0199-42) and Mouse IgG1 kappa Isotype Control, APC (Product # 17-4714-82) (left) or CD3 Monoclonal Antibody, APC (right). Cells in the lymphocyte gate were used for analysis.

View more figures on thermofisher.com

32 References

Immunohistochemistry (1)

eLife

Highly multiplexed immunofluorescence imaging of human tissues and tumors using t-CyCIF and conventional optical microscopes.

"17-0038 was used in Immunohistochemistry-immunofluorescence to develop a tissue-based cyclic immunofluorescence method for highly multiplexed immuno-fluorescence imaging of formalin-fixed, paraffin-embedded specimens mounted on glass slides."

Authors: Lin JR,Izar B,Wang S,Yapp C,Mei S,Shah PM,Santagata S,Sorger PK

Species
Human

Dilution
Not Cited

Year
2018

Flow Cytometry (31)

Nature communications

Single-cell RNA sequencing reveals ex vivo signatures of SARS-CoV-2-reactive T cells through 'reverse phenotyping'.

"17-0038-42 was used in Flow Cytometry to characterize the phenotypic profiles of SARS-CoV-2 antigen-reactive T cells."

Authors: Fischer DS,Ansari M,Wagner KI,Jarosch S,Huang Y,Mayr CH,Strunz M,Lang NJ,D'Ippolito E,Hammel M,Mateyka L,Weber S,Wolff LS,Witter K,Fernandez IE,Leuschner G,Milger K,Frankenberger M,Nowak L,Heinig-Menhard K,Koch I,Stoleriu MG,Hilgendorff A,Behr J,Pichlmair A,Schubert B,Theis FJ,Busch DH,Schiller HB,Schober K

Species
Human

Dilution
1:200

Year
2021

Frontiers in cellular and infection microbiology

Dendritic Cell Maturation Regulates TSPAN7 Function in HIV-1 Transfer to CD4^{+} T Lymphocytes.

"Published figure using CD3 monoclonal antibody (Product # 17-0038-42) in Flow Cytometry"

Authors: Perot BP,García-Paredes V,Luka M,Ménager MM

Species
Not Applicable

Dilution
Not Cited

Year
2021

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More applications with references on thermofisher.com