

# 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.

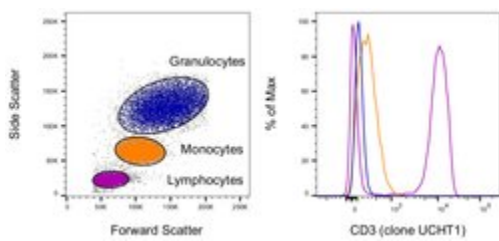
**Applications Reported:** The UCHT1 antibody has been reported for use in flow cytometric analysis.

**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<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.

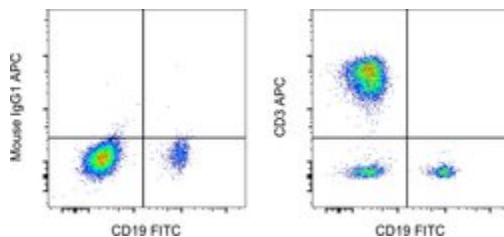
## Advanced Verification Data



### 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](https://www.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<sup>+</sup> 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

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

### More applications with references on thermofisher.com

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.