

# CD3 Monoclonal Antibody (UCHT1), Super Bright™ 436, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Super Bright™ 436, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	UCHT1
Conjugate	Super Bright™ 436
Excitation/Emission Max	413/431 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2662445

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5µL (0.25 µg)/test	4 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.

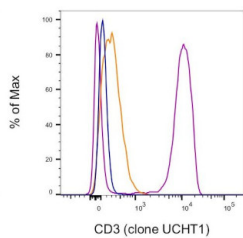
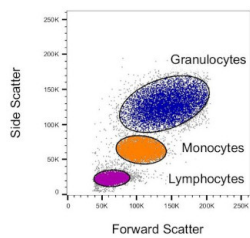
Super Bright 436 can be excited with the violet laser line (405 nm) and emits at 436 nm. We recommend using a 450/50 bandpass filter, or equivalent. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

Excitation: 405 nm; Emission: 436 nm; Laser: Violet Laser

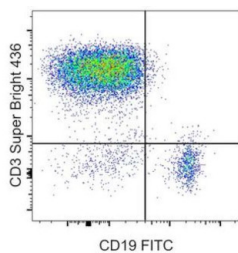
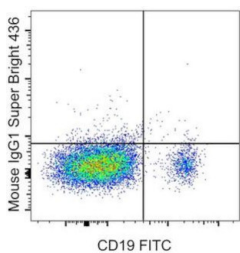
Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

## Product Images For CD3 Monoclonal Antibody (UCHT1), Super Bright™ 436, eBioscience™



### CD3 Antibody (62-0038-42)

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. {RE}



### CD3 Antibody (62-0038-42) in Flow

Staining of normal human peripheral blood cells with Anti-Human CD19 FITC (Product # 11-0199-42) and Mouse IgG1 K Isotype Control Super Bright 436 (Product # 62-4714-82) (left) or Anti-Human CD3 Super Bright 436 (right). Cells in the lymphocyte gate were used for analysis.

[View more figures on thermofisher.com](#)

## 4 References

### Flow Cytometry (4)

Cell host & microbe

#### Aberrant gut-microbiota-immune-brain axis development in premature neonates with brain damage.

"Published figure using CD3 monoclonal antibody (Product # 62-0038-42) in Flow Cytometry"

Authors: Seki D, Mayer M, Hausmann B, Pjevac P, Giordano V, Goeral K, Unterasinger L, Klebermaß-Schrehof K, De Paepe K, Van de Wiele T, Spittler A, Kasprian G, Warth B, Berger A, Berry D, Wisgrill L

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 # 62-0038-42) in Flow Cytometry"

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

Year  
2021

[View more Flow 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.