

# CD3 Monoclonal Antibody (UCHT1), APC, eBioscience™

## Product Details

|                             |  |
|-----------------------------|--|
| Size                        | 25 Tests   |
| Species Reactivity          | Human  |
| Published Species           | Rat, Human   |
| Host/Isotope                | 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_10804761  |

| Applications               | Tested | Dilution            | Published       |
|----------------------------|--------|---------------------|-----------------|
| Flow Cytometry (Flow)      | ✓      | 5 µL (0.25 µg)/test | 17 Publications |
| Immunofluorescence (IF)    | -      |                     | 1 Publication   |
| Immunohistochemistry (IHC) | -      |                     | 1 Publication   |

## 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.

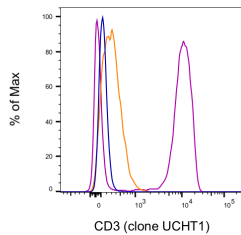
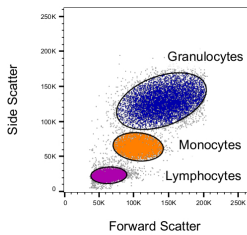
**Applications Reported:** The UCHT1 antibody has been reported for use in flow cytometric analysis.

**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.

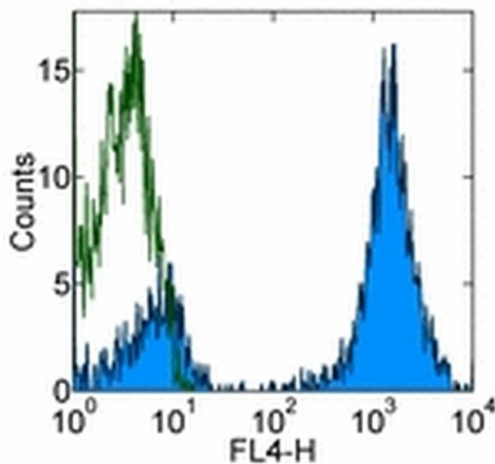
## Advanced Verification Data



### CD3 Antibody (17-0038-41)

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 (17-0038-41) in Flow

Staining of normal human peripheral blood cells with Mouse IgG1 K Isotype Control APC (Product # 17-4714-81) (open histogram) or Anti-Human CD3 APC (filled histogram). Cells in the lymphocyte gate were used for analysis.

[View more figures on thermofisher.com](https://www.thermofisher.com)

## 19 References

### Flow Cytometry (17)

#### Oncoimmunology

#### Antigen receptor-redirected T cells derived from hematopoietic precursor cells lack expression of the endogenous TCR/CD3 receptor and exhibit specific antitumor capacities.

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

Authors: Van Caeneghem Y, De Munter S, Tieppo P, Goetgeluk G, Weening K, Verstichel G, Bonte S, Taghon T, Leclercq G, Kerre T, Debets R, Vermijlen D, Abken H, Vandekerckhove B

#### Species

Not Applicable

#### Dilution

Not Cited

#### Year

2018

#### Cell research

#### Blocking the recruitment of naive CD4<sup>+</sup> T cells reverses immunosuppression in breast cancer.

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

Authors: Su S, Liao J, Liu J, Huang D, He C, Chen F, Yang L, Wu W, Chen J, Lin L, Zeng Y, Ouyang N, Cui X, Yao H, Su F, Huang JD, Lieberman J, Liu Q, Song E

**Species**  
Human  
Not Applicable

**Dilution**  
Not Cited  
Not Cited

**Year**  
2017

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

## Immunofluorescence (1)

eLife

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

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

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2018

## Immunohistochemistry (1)

eLife

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

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

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2018

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