

# CD3 Monoclonal Antibody (UCHT1), eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Human
Published Species	Rat, Human
Host/Isotype	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	UCHT1
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_467059

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	6 Publications
Immunohistochemistry (Frozen) (IHC (F))	Assay-Dependent	1 Publication
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	1 µg/test	45 Publications
ELISA (ELISA)	-	1 Publication
Functional Assay (FN)	Assay-Dependent	8 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, and immunohistochemical staining. UCHT1 has also been reported in activation of T cells. (Please use Functional Grade purified UCHT1, cat. 16-0038, in functional assays.).

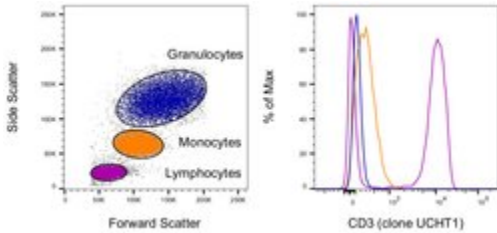
**Applications Tested:** The UCHT1 antibody has been tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

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

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

Filtration: 0.2 µm post-manufacturing filtered.

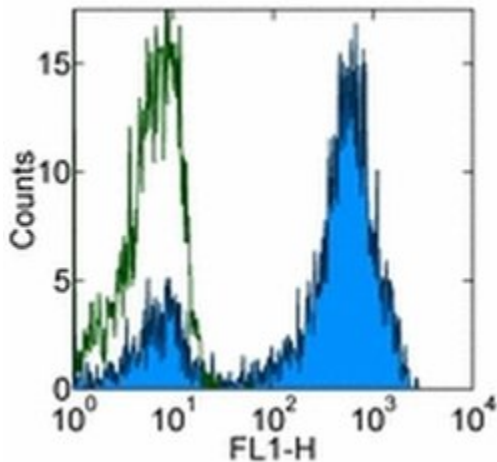
## Advanced Verification Data



### CD3 Antibody (14-0038-82)

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), eBioscience™



### CD3 Antibody (14-0038-82) in Flow

Staining of normal human peripheral blood cells with 0.5 µg of Mouse IgG1 K Isotype Control Purified (Product # 14-4714-82) (open histogram) or 0.5 µg of Anti-Human CD3 Purified (filled histogram) followed by Anti-Mouse IgG FITC (Product # 11-4011-85). Cells in the lymphocyte gate were used for analysis.

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

## Immunohistochemistry (6)

The Journal of pharmacology and experimental therapeutics

### The antiangiogenic insulin receptor substrate-1 antisense oligonucleotide aganirsen impairs AU-rich mRNA stability by reducing 14-3-3-tristetraprolin protein complex, reducing inflammation and psoriatic lesion size in patients.

"14-0038 was used in Immunohistochemistry to demonstrate that aganirsen is the first of a new generation of antiangiogenic medicines combining anti-inflammatory activities."

Authors: Colin S,Darné B,Kadi A,Ferry A,Favier M,Lesaffre C,Conduzorgues JP,Al-Mahmood S,Doss N

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2014

PloS one

### Ulcerative colitis impairs the acylethanolamide-based anti-inflammatory system reversal by 5-aminosalicylic acid and glucocorticoids.

"Published figure using CD3 monoclonal antibody (Product # 14-0038-82) in Immunofluorescence"

Authors: Suárez J,Romero-Zerbo Y,Márquez L,Rivera P,Iglesias M,Bermúdez-Silva FJ,Andreu M,Rodríguez de Fonseca F

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2012

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

## Immunohistochemistry (Frozen) (1)

Molecular cancer research : MCR

### Distinct Transcriptional Changes and Epithelial-Stromal Interactions Are Altered in Early-Stage Colon Cancer Development.

"14-0038 was used in Immunofluorescence in immunohistochemistry on frozen tissues to perform a detailed characterisation of aberrant crypt foci in the human colon to better understand the epithelial-stromal interactions that regulate their progression to malignancy."

Authors: Mo A,Jackson S,Varma K,Carpino A,Giardina C,Devers TJ,Rosenberg DW

**Species**  
Human

**Dilution**  
1:200

**Year**  
2016

## Immunocytochemistry (1)

PloS one

### Ulcerative colitis impairs the acylethanolamide-based anti-inflammatory system reversal by 5-aminosalicylic acid and glucocorticoids.

"Published figure using CD3 monoclonal antibody (Product # 14-0038-82) in Immunofluorescence"

Authors: Suárez J,Romero-Zerbo Y,Márquez L,Rivera P,Iglesias M,Bermúdez-Silva FJ,Andreu M,Rodríguez de Fonseca F

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2012

## More applications with references on thermofisher.com

Flow (45)

ELISA (1)

FN (8)

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