

# CD3 Monoclonal Antibody (UCHT1), Alexa Fluor™ 532, 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), Alexa Fluor™ 532, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	UCHT1
Conjugate	Alexa Fluor™ 532
Excitation/Emission Max	534/553 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_11218675

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	3 Publications
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	5 µL (0.25 µg)/test	29 Publications
T-Cell Activation (TCA)	-	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:** This UCHT1 antibody has been reported for use in flow cytometric analysis.

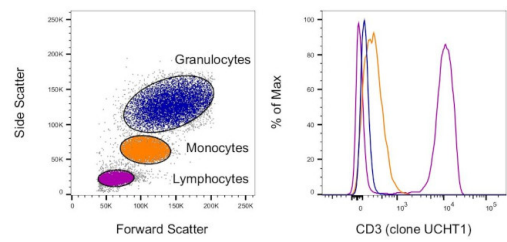
**Applications Tested:** This UCHT1 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.25 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test.

Alexa Fluor® 532 is excited with the Green laser (532 nm) and emits at 561 nm. This cannot be used with the Yellow-Green

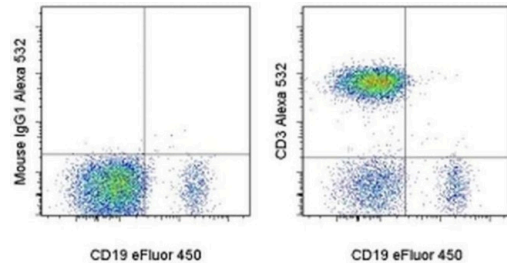
laser (561 nm). We recommend using a 560/14 band pass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

Excitation: 532 nm; Emission: 561 nm; Laser: Green Laser

Product Images For CD3 Monoclonal Antibody (UCHT1), Alexa Fluor™ 532, eBioscience™



**CD3 Antibody (58-0038-42)**  
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 (58-0038-42) in Flow**  
Staining of normal human peripheral blood cells with Anti-Human CD19 eFluor® 450 (Product # 48-0199-42) and Mouse IgG1 K Isotype Control Alexa Fluor® 532 (Product # 58-4714-80) (left) or Anti-Human CD3 Alexa Fluor® 532 (right). Cells in the lymphocyte gate were used for analysis.

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Immunohistochemistry (3)

<p>PloS one</p> <p><b>Ulcerative colitis impairs the acylethanolamide-based anti-inflammatory system reversal by 5-aminosalicylic acid and glucocorticoids.</b></p> <p>"Published figure using CD3 monoclonal antibody (Product # 58-0038-42) in Immunofluorescence"</p> <p>Authors: Suárez J,Romero-Zerbo Y,Márquez L,Rivera P,Iglesias M,Bermúdez-Silva FJ,Andreu M,Rodríguez de Fonseca F</p>	<p>Year</p> <p>2012</p>
<p>Hepatology (Baltimore, Md.)</p> <p><b>Accumulation of natural killer T cells in progressive nonalcoholic fatty liver disease.</b></p> <p>"Published figure using CD3 monoclonal antibody (Product # 58-0038-42) in Immunohistochemistry"</p> <p>Authors: Syn WK,Oo YH,Pereira TA,Karaca GF,Jung Y,Omenetti A,Witek RP,Choi SS,Guy CD,Fearing CM,Teaberry V,Pereira FE,Adams DH,Diehl AM</p>	<p>Year</p> <p>2010</p>

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Immunocytochemistry (1)

<p>PloS one</p> <p><b>Ulcerative colitis impairs the acylethanolamide-based anti-inflammatory system reversal by 5-aminosalicylic acid and glucocorticoids.</b></p> <p>"Published figure using CD3 monoclonal antibody (Product # 58-0038-42) in Immunofluorescence"</p> <p>Authors: Suárez J,Romero-Zerbo Y,Márquez L,Rivera P,Iglesias M,Bermúdez-Silva FJ,Andreu M,Rodríguez de Fonseca F</p>	<p>Year</p> <p>2012</p>
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Flow Cytometry (29)

<p>International journal of molecular sciences</p> <p><b>Early and Polyantigenic CD4 T Cell Responses Correlate with Mild Disease in Acute COVID-19 Donors.</b></p> <p>"58-0038-42 was used in Flow cytometry/Cell sorting to highlight that both the magnitude and breadth of early SARS-CoV-2-specific CD4+ T cell responses correlated with milder disease outcomes in acute COVID-19 patients."</p> <p>Authors: Tarke A,Potesta M,Varchetta S,Fenoglio D,Iannetta M,Sarmati L,Mele D,Dentone C,Bassetti M,Montesano C,Mondelli MU,Filaci G,Grifoni A,Sette A</p>	<p>Year</p> <p>2022</p> <p>Species</p> <p>Human</p> <p>Dilution</p> <p>1:1000</p>
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More applications with references on thermofisher.cn

TCA (1)

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