

For Research Use Only

# CoraLite® Plus 555 Anti-Human CD3 (UCHT1)

Catalog Number: CL555-65151



## Basic Information

Catalog Number:

CL555-65151

Concentration:

100 tests, 5 µl/test

Source:

Mouse

Isotype:

IgG1, kappa

GenBank Accession Number:

BC049847

GeneID (NCBI):

916

ENSEMBL Gene ID:

ENSG00000198851

UNIPROT ID:

P07766

Full Name:

CD3ε molecule, epsilon (CD3-TCR complex)

Calculated MW:

207 aa, 23 kDa

Purification Method:

Affinity purification

CloneNo.:

UCHT1

Recommended Dilutions:

IF/ICC: 1:10-1:100

FC: 5 µl per 10<sup>6</sup> cells in 100 µl suspension

Excitation/Emission maxima wavelengths:

554 nm / 570 nm

## Applications

Tested Applications:

IF/ICC, FC

Species Specificity:

human

Positive Controls:

IF/ICC : human PBMCs,

FC : human PBMCs,

## Background Information

CD3 is a multimeric protein associated with the T-cell receptor (TCR) to form a complex involved in antigen recognition and signal transduction (PMID: 15885124). CD3 is composed of CD3  $\gamma$ ,  $\delta$ ,  $\epsilon$ , and  $\zeta$  chains (PMID: 1826255). It is expressed by thymocytes in a developmentally regulated manner, T cells, and some NK cells (PMID: 3289580). The TCR recognizes antigens bound to major histocompatibility complex (MHC) molecules. TCR-mediated peptide-MHC recognition is transmitted to the CD3 complex, leading to the intracellular signal transduction (PMID: 11985657).

## Storage

Storage:

Store at 2-8°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

PBS with 0.09% sodium azide and 0.5% BSA, pH7.3

For technical support and original validation data for this product please contact:

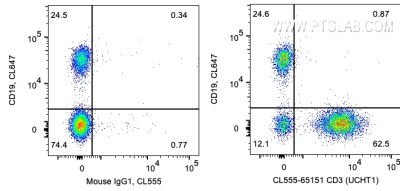
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

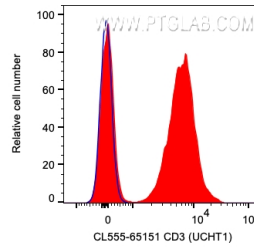
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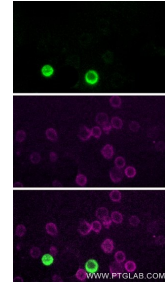
## Selected Validation Data



1X10<sup>6</sup> human PBMCs were surface co-stained with CL647 Anti-Human CD19 and 5 ul CoraLite® Plus 555 Anti-Human CD3 (CL555-65151, Clone:UCHT1) or Mouse IgG1 Isotype Control. Cells were not fixed. Lymphocytes were gated.



1X10<sup>6</sup> human PBMCs were surface stained with 5 ul CoraLite® Plus 555 Anti-Human CD3 (CL555-65151, Clone:UCHT1) (red) or Mouse IgG1 Isotype Control. Cells were not fixed. Lymphocytes were gated.



Live human PBMCs were gravity-sedimented and immunostained with anti-CD16 recombinant VHH, FITC Plus (FITC-CD16, green) and anti-CD3 IgG-CL555 (CL555-65151, magenta). Images were acquired with a 20x objective and post-processed. Dead cells (autofluorescent in all channels including UV and far-red) we subtracted from all channels with ImageJ.