# Anti-Human CD3 Antibody, Clone UCHT1, PerCP

### **Antibodies**

Mouse monoclonal IgG1 antibody against human, chimpanzee CD3,

PerCP-conjugated

Catalog #60011PR #60011PR.1 100 tests 5 μL/test 25 tests 5 μL/test



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## **Product Description**

The UCHT1 antibody reacts with the ~20 kDa CD3 $\epsilon$  subunit of the human T cell receptor (TCR)/CD3 complex, which is expressed on the surface of ~95% of mature T cells and NK-T cells, and variably on thymocytes. A majority of T cell neoplasms also express CD3. The CD3 complex, which is assembled from combinations of CD3 $\gamma$ ,  $\delta$ ,  $\epsilon$ ,  $\eta$  and  $\zeta$  subunits, associates non-covalently with the TCR and is involved in transducing antigen recognition signals into the cytoplasm of T cells and in regulating the cell surface expression of the TCR. Activation of T cells by the TCR involves the cytoplasmic tails of the CD3 subunits, which are structurally related type 1 transmembrane proteins and members of the immunoglobulin super family. Mutations in the CD3 subunits have been associated with various immunodeficiency disorder (SCID).

Target Antigen Name: CD3

Alternative Names: CD3e, CD3epsilon, T3

Gene ID: 915

Species Reactivity: Human, Chimpanzee
Host Species: Mouse (BALB/c)
Clonality: Monoclonal
Clone: UCHT1

Isotype: IgG1, kappa

Immunogen: Human infant thymocytes followed by Sézary T cells

Conjugate: PerCP

# **Applications**

Verified: FC Reported: FC

Special Applications: This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including

EasySep™ Direct Human T Cell Isolation Kit (Catalog #19661), EasySep™ Human CD3 Positive Selection Kit (Catalog #18051; partial blocking may be observed), EasySep™ HLA Whole Blood T Cell Enrichment Kit (Catalog #19951HLA), and EasySep™ HLA Whole Blood CD2 Positive Selection Kit (Catalog #18687HLA).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

# **Properties**

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) bovine serum albumin

Purification: The antibody was purified by affinity chromatography and conjugated with PerCP under optimal conditions.

The solution is free of unconjugated PerCP and unconjugated antibody.

Stability and Storage: Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to

light. For product expiry date, please contact techsupport@stemcell.com.

Directions for Use: For flow cytometry the suggested use of this antibody is  $\leq 5 \,\mu$ L per 1 x 10^6 cells in 100  $\mu$ L volume. It is

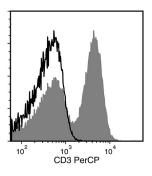
recommended that the antibody be titrated for optimal performance for each application.

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#### Data



Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with Anti-Human CD3 Antibody, Clone UCHT1, PerCP (filled histogram) or a mouse IgG1, kappa isotype control antibody, PerCP (solid line histogram).

#### Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

### References

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