

anti-human CD3 (no azide)

monoclonal antibody UCHT-1 to human CD3

Cat-No: **21620030**

100 µg in 100 µl

Clone: UCHT-1

Specificity: The antibody UCHT1 recognizes the CD3 antigen of the TCR/CD3 complex on mature human T cells. The UCHT1 antibody reacts with the epsilon chain of the CD3 complex.

HLDA I; WS Code T 3

HLDA III; WS Code T 126

HLDA III; WS Code T 471

HLDA VI; WS Code T 6T-CD3.1

Isotype subclass: Mouse monoclonal IgG1/kappa

Immunogen: human thymocytes followed by Sezary T cells

Physical state: Liquid

Buffer/Additives/Preservative: PBS (sterile), (pH 7.4)

Expiration date: The reagent is stable until the expiry date stated on the vial label.

Storage conditions: Aliquot and store at -20°C. Avoid freeze/thaw cycle s. Should be handled under aseptic conditions.

Application: The UCHT-1 antibody is recommended for frozen tissue sections, histology, RIA, immunoprecipitation and flow cytometry.

The epitope for UCHT-1 a-CD3 is resistant to fixation. For purposes where pre-fixed cells are stained, this antibody is recommended.

References:

- *Huang Y, Wang RL: J Biol Chem. 2004 Jul 9;279(28):28827-30.
- *Kuhns MS and others: Immunity. 2006 Feb;24(2):133-9.
- *Alarcón B and others: EMBO Rep. 2006 May;7(5):490-5.

Background: CD3 complex is crucial in transducing antigen-recognition signals into the cytoplasm of T cells and in regulating the cell surface expression of the TCR complex. T cell activation through the antigen receptor (TCR) involves the cytoplasmic tails of the CD3 subunits CD3 gamma, CD3 delta, CD3 epsilon and CD3 zeta. These CD3 subunits are structurally related members of the immunoglobulins super family encoded by closely linked genes on human chromosome 11. The CD3 components have long cytoplasmic tails that associate with cytoplasmic signal transduction molecules. This association is mediated at least in part by a double tyrosine-based motif present in a single copy in the CD3 subunits. CD3 may play a role in TCR-induced growth arrest, cell survival and proliferation.

The CD3 antigen is present on 68-82% of normal peripheral blood lymphocytes, 65-85% of thymocytes and Purkinje cells in the cerebellum. It is never expressed on B or NK cells. Decreased percentages of T lymphocytes may be observed in some autoimmune diseases.

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ImmunoTools GmbH - Altenoyther Str. 10; 26169 Friesoythe; Germany

Tel +49-(0)4491-400997, Fax +49-(0)4491-400998, info@immunotools.com

www.immunotools.com