## anti-human CD3 FITC-conjugated

**FITC-** conjugated monoclonal antibody to CD3 (Human)

Cat-No: **21620033** 500 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

**Form:** The purified antibody is conjugated with Fluoresceinisothiocyanate (FITC) under optimum conditions. The reagent is adjusted for direct use. No reconstitution is necessary.

Physical state: Liquid

Buffer/Additives/Preservative: PBS containing 1% BSA and 0.09% sodium azide (pH 7.2)

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

Storage conditions: Store at 4 °C. Do not freeze. Avoid prolonged exposure to light.

**Application:** Flow Cytometry.

**References:** • \*Huang Y, Wange 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.

**Warning:** Sodium azide is harmful if swallowed (R22). Keep out of reach of children (S2). Keep away from food, drink and animal feeding stuff (S13). Wear suitable protective clothing (S36). If swallowed, seek medical advice immediately and show this container or label (S46). Contact with acids liberates very toxic gas (R32). Azide compounds should be flushed with large volumes of water during disposal to avoid deposits in lead or copper plumbing where explosive conditions can develop.

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