

11-514-C025

Monoclonal Antibody to CD3 Purified Antibody (0.025 mg)

Clone: UCHT1

Isotype: Mouse IgG1

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

Regulatory Status: RUO

Immunogen: human thymocytes followed by Sezary T cells

Species Reactivity: Human, Non-Human Primates

Application: Flow Cytometry

Application note:

The epitope for UCHT1, CD3 is resistant to fixation. For purposes where pre-fixed

cells are stained, this antibody is recommended.

Immunoprecipitation

Immunohistochemistry (frozen sections)

Application note: The epitope for UCHT1, CD3 is resistant to fixation. For purposes

where pre-fixed cells are stained, this antibody is recommended.

Mass Cytometry Functional Application

The immobilized UCHT1 antibody initiates a signaling pathway resulting in T cell

activation and proliferation.

Purity: > 95% (by SDS-PAGE)

Purification: Purified by protein-A affinity chromatography

Concentration: 1 mg/ml

Storage Buffer: Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4

Storage / Stability: Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial

label.

Expiration: See vial label

Lot Number: See vial label





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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- *And many other.

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