

## 30-2803: Anti-Hu CD3 Purified Low Endotoxin

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|--------------------------------|--|
| <b>Clonality :</b>             | Monoclonal                                       |
| <b>Clone Name :</b>            | OKT3   |
| <b>Application :</b>           | FACS, IHC-Fr, FUNC                               |
| <b>Reactivity :</b>            | Human  |
| <b>Conjugate :</b>             | Purified Low Endotoxin                           |
| <b>Gene :</b>                  | CD3E   |
| <b>Gene ID :</b>               | 916  |
| <b>Uniprot ID :</b>            | P07766   |
| <b>Alternative Name :</b>      | CD3 antigen, epsilon polypeptide CD3E, T3E, TCRE |
| <b>Immunogen Information :</b> | human T cells                                    |

### Description

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 Purkynje 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.

**Specificity :** The mouse monoclonal antibody OKT3 recognizes an extracellular epitope on CD3 antigen of the TCR/CD3 complex on mature human T cells. This antibody, also known as Orthoclone OKT3 or Muromonab-CD3, has been extensively used as a drug for therapy of acute, glucocorticoid resistant rejection of allogenic renal, heart and liver transplants. It has also been investigated for use in treating T-cell acute lymphoblastic leukemia.

### Product Info

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|----------------------------|---|
| <b>Amount :</b>            | 0.1 mg  |
| <b>Purification :</b>      | Purified by protein-A affinity chromatography.  |
| <b>Content :</b>           | Storage Buffer: Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide |
| <b>Storage condition :</b> | Store at 2-8°C. Do not freeze.  |

### Application Note

Functional application: counteracting both generation and function of effector T cells.

Flow cytometry: Recommended dilution: 1 µg/ml.