

30-1594: Anti-CD3 Monoclonal Antibody (Clone:MEM-57)-Low Endotoxin

Clonality :	Monoclonal
Clone Name :	MEM-57
Application :	FACS, IP, Functional Assay, MC
Reactivity :	Human
Gene :	CD3E
Gene ID :	916
Uniprot ID :	P07766
Format :	Low Endotoxin
Alternative Name :	CD3E,T3E
Isotype :	Mouse IgG2a
Immunogen Information :	Human thymocytes and T lymphocytes.

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 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.

Product Info

Amount :	0.1 mg
Purification :	Purified by protein-A affinity chromatography
Storage condition :	Store at 2-8°C. Do not freeze.

Application Note

Flow Cytometry *Recommended dilution:* 2 - 5 $\mu\text{g/ml}$

Positive control:

Peripheral Blood Lymphocytes

JURKAT human leukemia T cell line **Immunoprecipitation** The antibody MEM-57 immunoprecipitates from a detergent lysate of surface-radioiodinated T cells a strong zone of about 22 kDa and a weak 28-kDa zone, which is typical pattern yielded by a reference antibody Leu-4 (SK7). **Mass Cytometry Functional Application** The antibody MEM-57 has strong mitogenic effect on peripheral T lymphocytes; it reacts strongly with gamma/delta T lymphocytes.