

30-1257: Anti-CD3 Monoclonal Antibody (Clone:MEM-92)

Clonality :	Monoclonal
Clone Name :	MEM-92
Application :	FACS, IP, Functional Assay
Reactivity :	Human
Gene :	CD3E
Gene ID :	916
Uniprot ID :	P07766
Format :	Purified
Alternative Name :	CD3E,T3E
Isotype :	Mouse IgM
Immunogen Information :	Human peripheral blood 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 precipitation and chromatography
Storage condition :	Store at 2-8°C. Do not freeze.

Application Note

Flow Cytometry *Recommended dilution:* 2-10 $\mu\text{g/ml}$

Immunoprecipitation Functional Application The antibody MEM-92 in solution induces early responses of T cell activation (tyrosine phosphorylation, calcium elevation, Erk activation and expression of activation antigens), but it is unable to induce T cell proliferation.