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Product datasheet for SM3017LE

CD3E Mouse Monoclonal Antibody [Clone ID: MEM-57]

Product data:

Product Type:	Primary Antibodies
Clone Name:	MEM-57
Applications:	FC, FN, IP
Recommended Dilution:	**Flow Cytometry:** 2 - 5 µg/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). **Functional Application:**The antibody MEM-57 has strong mitogenic effect on peripheral T lymphocytes; it reacts strongly with gamma/delta T lymphocytes.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Human thymocytes and T lymphocytes
Specificity:	This antibody reacts with gamma-epsilon and delta-epsilon dimers of human CD3 complex, a part of a bigger multisubunit T cell receptor complex (CD3/TCR) expressed on peripheral blood T lymphocytes and mature thymocytes.
Formulation:	Phosphate buffered saline (PBS), approx. pH 7.4; 0.2 µm filter sterilized. Endotoxin level is less than 10 EU/mg of the protein, as determined by the LAL test. State: Low Endotoxin State: Liquid Ig fraction
Concentration:	lot specific
Purification:	Protein-A affinity chromatography; > 95% pure (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C. **DO NOT FREEZE!**
Stability:	Shelf life: one year from despatch.

View online »

Gene Name: CD3e molecule

Database Link: Entrez Gene 916 Human
P07766

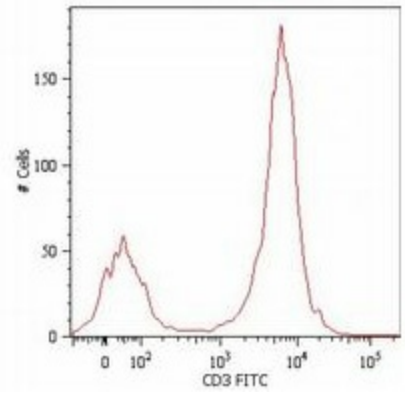
Background: CD3 complex is crucial in transducing antigen-recognition signals into the cytopasm of T cells and in regulating the cell surface expression of the TCR complex. T cell activation through the antigen receptor (TCR) involves the cytoplasmic tails of the CD3 subunits CD3 gamma, CD3 delta, CD3 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.

Synonyms: T3/Leu-4

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Hematopoietic cell lineage, Primary immunodeficiency, T cell receptor signaling pathway

Product images:



Surface staining of human peripheral blood cells with anti-human CD3 (Clone MEM-57) FITC. Cells in the lymphocyte gate were used for analysis.