

## Product datasheet for **SM3017F**

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

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	MEM-57
Applications:	FC
Recommended Dilution:	<b>Flow Cytometry:</b> use 20 µl reagent / 100 µl whole blood or 10 <sup>6</sup> cells in a suspension.
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) Label: FITC State: Liquid purified Ig fraction Preservative: 15 mM sodium azide
Conjugation:	FITC
Storage:	Store the antibody at 2 - 8 °C. DO NOT FREEZE! This product is photosensitive and should be protected from light.
Stability:	Shelf life: one year from despatch.
Database Link:	<a href="#">Entrez Gene 916 Human P07766</a>



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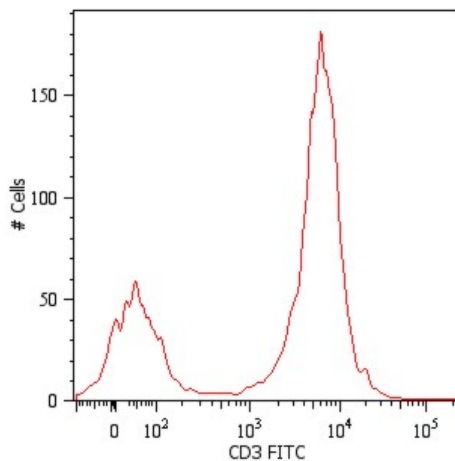
**Background:**

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.

**Synonyms:**

T3/Leu-4

**Product images:**

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