

## TECHNICAL DATA SHEET

### CyFlow™ CD3 Purified Anti-Hu; Clone MEM-92

**REF** CZ811996



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**For Research Use Only.**

**Not for use in diagnostic or therapeutic procedures.**

### Specifications

Antigen	CD3
Alternative Names	T3, Leu4
Clone	MEM-92
Clonality	monoclonal
Format	Purified
Host / Isotype	Mouse / IgM
Species Reactivity	Human
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [ 1 mg/mL ]
Immunogen	Human thymocytes and T lymphocytes

## Specificity

The mouse monoclonal antibody MEM-92 recognizes  $\epsilon$  chain of human CD3 complex, a part of a bigger multisubunit complex of the T cell receptor (CD3/TCR) expressed on peripheral blood T lymphocytes and mature thymocytes.

HLDA IV—WS Code T 97

## Application

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Immunoprecipitation
- Functional assays

## Storage Buffer

The reagent is provided in Tris buffered saline (TBS) solution, pH  $\approx$ 8.0, containing 0.09% (w/v) sodium azide.

## Storage and Stability

<b>Storage</b>	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
<b>Stability</b>	Do not use after expiration date stamped on vial label.

## Background Information

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 superfamily 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.

## Warnings

**Non-Hazardous Statement:** This is not considered hazardous by the criteria in 29 CFR 1910.1200 or the General Classification guideline for preparations of the EU.











**Safety Data Sheet Statement:** Important information regarding the safe handling, transport, and disposal of this product is contained in the Safety Data Sheet (SDS). SDS are available at <http://www.sysmex-partec.com/services>, or at <https://us.sysmex-flowcytometry.com/> (U.S. customers only).

## References

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## Symbols

	Reference number		Contains sufficient for <n> tests
	For research use only		Temperature limit
	Batch code		Keep away from sunlight
	Manufacturer		Consult accompanying documents
	Use-by date		Unique device identifier