

## TECHNICAL DATA SHEET

### CyFlow™ CD8 PE-DyLight™ 594 Anti-Hu; Clone MEM-31

**REF** CT697377

**For Research Use Only.**  
**Not for use in diagnostic or therapeutic procedures.**

### Specifications

|                                    |                                |
|------------------------------------|--------------------------------|
| <b>Antigen</b>                     | CD8                            |
| <b>Alternative Names</b>           | —                              |
| <b>Clone</b>                       | MEM-31                         |
| <b>Clonality</b>                   | monoclonal                     |
| <b>Format</b>                      | PE-DyLight™ 594                |
| <b>Host / Isotype</b>              | Mouse / IgG2a                  |
| <b>Species Reactivity</b>          | Human                          |
| <b>Negative Species Reactivity</b> | —                              |
| <b>Quantity</b>                    | 100 tests                      |
| <b>Immunogen</b>                   | Crude thymus membrane fraction |

### Specificity

The mouse monoclonal antibody MEM-31 recognizes a conformationally-dependent epitope of CD8 antigen, a cell surface glycoprotein found on most cytotoxic T lymphocytes that mediates efficient cell-

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cell interactions within the immune system. CD8 is a disulfide-linked dimer and exists as a CD8  $\alpha/\alpha$  homodimer or CD8  $\alpha/\beta$  heterodimer (each monomer approx. 32-34 kDa).

The antibody does not react with formaldehyde-fixed cells; negative in Western Blotting application.

## Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 4  $\mu$ l reagent / 100  $\mu$ l of whole blood or  $10^6$  cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

## Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH  $\approx$ 7.4, containing 0.1% (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

The CD8 T cell coreceptor (monomer approx. 32-34 kDa) is expressed as  $\alpha/\beta$  heterodimer on majority of MHC I-restricted conventional T cells and thymocytes and as  $\alpha/\alpha$  homodimer on subsets of memory T cells, intraepithelial lymphocytes, NK cells and dendritic cells. Regulation of CD8  $\beta$  level on T cell surface seems to be an important mechanism to control their effector function. Assembly of CD8  $\alpha/\beta$  but not  $\alpha/\alpha$  dimers is connected with formation or localization to the lipid rafts. Recruiting triggered TCR complexes to these membrane microdomains as well as affinity of TCR to MHC I is modulated by CD8, thereby affecting the functional diversity of the TCR signaling.

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The Safety Data Sheet for this product is available at [www.sysmex-partec.com/services](http://www.sysmex-partec.com/services).

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