

TECHNICAL DATA SHEET

CyFlow™ CD8 Biotin Anti-Hu; Clone MEM-31

REF AM060913

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD8
Alternative Names	—
Clone	MEM-31
Clonality	monoclonal
Format	Biotin
Host / Isotype	Mouse / IgG2a
Species Reactivity	Human
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	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 α/α homodimer or CD8 α/β 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 indirect immunofluorescence analysis by Flow Cytometry. Suggested working usage is 0.4 $\mu\text{g/ml}$. Indicated dilution is recommended starting point for use of this product, but working concentrations should be validated by the investigator.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH ≈ 7.4 , containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	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 α/β heterodimer on majority of MHC I-restricted conventional T cells and thymocytes and as α/α homodimer on subsets of memory T cells, intraepithelial lymphocytes, NK cells and dendritic cells. Regulation of CD8 β level on T cell surface seems to be an important mechanism to control their effector function. Assembly of CD8 α/β but not α/α 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.

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