TECHNICAL DATA SHEET

CyFlow™ CD11a Purified
Anti-Hu; Clone MEM-83

REF **CS703732**

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

Specifications

Antigen	CD11a
Alternative Names	LFA-1
Clone	MEM-83
Clonality	monoclonal
Format	Purified
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	Human peripheral blood lymphocytes

Specificity

The mouse monoclonal antibody MEM-83 recognizes CD11a (α subunit of human LFA-1) antigen, a 170-180 kDa type I transmembrane glycoprotein expressed on B and T lymphocytes, monocytes, macrophages, neutrophils, basophils and eosinophils.

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 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

CD11a (LFA-1 α) together with CD18 constitute leukocyte function-associated antigen 1 (LFA-1), the αLβ2 integrin. CD11a is implicated in activation of LFA-1 complex. LFA-1 is expressed on the plasma membrane of leukocytes in a low-affinity conformation. Cell stimulation by chemokines or other signals leads to induction the high-affinity conformation, which supports tight binding of LFA-1 to its ligands, the intercellular adhesion molecules ICAM-1, -2, -3. LFA-1 is thus involved in interaction of various immune cells and in their tissue-specific settlement, but participates also in control of cell differentiation and proliferation and of T-cell effector functions. Blocking of LFA-1 function by specific antibodies or small molecules has become an important therapeutic approach in treatment of multiple inflammatory diseases. For example, humanized anti-LFA-1 antibody Efalizumab (Raptiva) is being used to interfere with T cell migration to sites of inflammation; binding of cholesterol-lowering drug simvastatin to CD11a allosteric site leads to immunomodulation and increase in lymphocytic cholinergic activity.

References

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The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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