

### 30-2661: Anti-Human CD11a PE (Clone : MEM-83)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	MEM-83
<b>Application :</b>	FACS
<b>Reactivity :</b>	Human
<b>Conjugate :</b>	PE
<b>Gene :</b>	ITGAL
<b>Gene ID :</b>	3683
<b>Alternative Name :</b>	LFA-1, LFA1A, ITGAL,integrin subunit alpha L
<b>Isotype :</b>	Mouse IgG1
<b>Immunogen Information :</b>	Human peripheral blood lymphocytes

#### Description

CD11a (LFA-1 alpha) together with CD18 constitute leukocyte function-associated antigen 1 (LFA-1), the alphaLbeta2 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.

**Specificity :** The antibody MEM-83 reacts with an extracellular epitope of CD11a (alpha subunit of human LFA-1), a 170-180 kDa type I transmembrane glycoprotein expressed on B and T lymphocytes, monocytes, macrophages, neutrophils, basophils and eosinophils.

#### Product Info

<b>Amount :</b>	100 tests
<b>Purification :</b>	The purified antibody is conjugated with R-phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography.
<b>Content :</b>	Formulation : Stabilizing phosphate buffered saline (PBS) solution containing 15 mM sodium azide
<b>Storage condition :</b>	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light.

#### Application Note

**Flow cytometry:** The reagent is designed for analysis of human blood cells using 10<sup>5</sup> cells / 100 μl of whole blood or 10<sup>6</sup> cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.

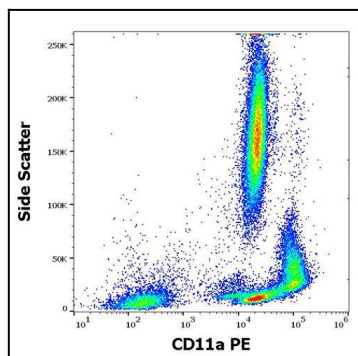


Figure 1 : Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD11a (MEM-83) PE antibody (4  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).

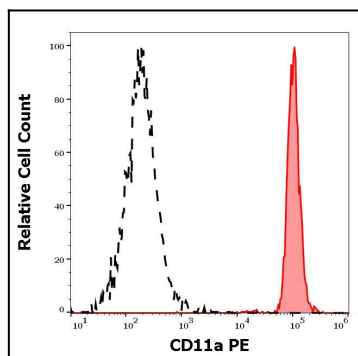


Figure 2 : Separation of human monocytes (red-filled) from CD45 negative cells (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD11a (MEM-83) PE antibody (4  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).