

## 30-1123-PerCP-Cy5.5: Anti-CD25 / IL-2R alpha chain Monoclonal Antibody (Clone:MEM-181) PerCP-Cy™ 5.5 Conjugated

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	MEM-181
<b>Application :</b>	FACS
<b>Reactivity :</b>	Human
<b>Gene :</b>	IL2RA
<b>Gene ID :</b>	3559
<b>Uniprot ID :</b>	P01589
<b>Alternative Name :</b>	IL2RA
<b>Isotype :</b>	Mouse IgG1
<b>Immunogen Information :</b>	PHA-activated peripheral blood leucocytes

### Description

**Specificity:** The antibody MEM-181 reacts with an extracellular epitope of CD25 (Interleukin-2 receptor alpha chain), a 55 kDa type I transmembrane glycoprotein expressed on activated B and T lymphocytes, activated monocytes/macrophages and on CD4+ T lymphocytes (T regulatory cells); it is lost on resting B and T lymphocytes.

**Description:** CD25 (IL2Ralpha, Tac) is a ligand-binding alpha subunit of interleukin 2 receptor (IL2R). Together with beta and gamma subunit CD25 constitutes the high affinity IL2R, whereas CD25 alone serves as the low affinity IL2R. CD25 expression rapidly increases upon T cell activation. The 55 kDa CD25 molecule is enzymatically cleaved and shed from the cell surface as a soluble 45 kDa s-Tac, whose concentration in serum can be used as a marker of T cell activation. Expression of CD25 indicates the neoplastic phenotype of mast cells. Humanized anti CD25 antibodies represent a useful tool to reduce the incidence of allograft rejection as well as the severity of graft versus host reaction, and radioimmunoconjugates of anti-CD25 antibodies can be used against CD25 expressing lymphomas.

### Product Info

<b>Amount :</b>	100 tests
<b>Purification :</b>	Purified antibody is conjugated with activated tandem dye of activated Peridinin-Chlorophyll Protein-Cyanine 5.5 (PerCP-Cy™ 5.5) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
<b>Content :</b>	<b>Formulation :</b> Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
<b>Storage condition :</b>	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

### Application Note

**Flow cytometry:** The reagent is designed for analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10<sup>6</sup> cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

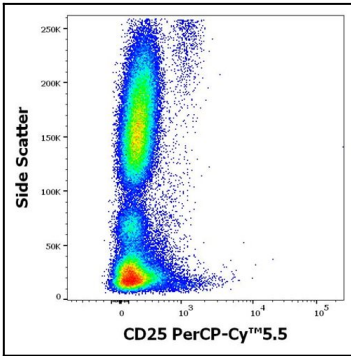


Figure 1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD25 (MEM-181) PerCP-Cy5.5 antibody (concentration in sample 0.5 µg/ml).

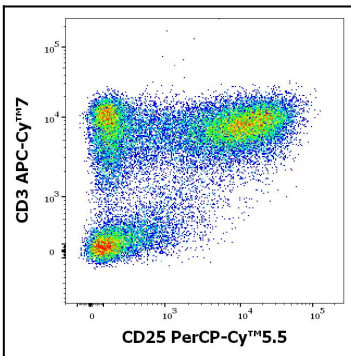


Figure 2: Flow cytometry multicolor surface staining pattern of human PHA stimulated lymphocytes using anti-human CD25 (MEM-181) PerCP-Cy5.5 antibody (concentration in sample 0.5 µg/ml) and anti-human CD3 (UCHT1) APC-Cy7 antibody (4 µl reagent / 100 µl of peripheral whole blood).

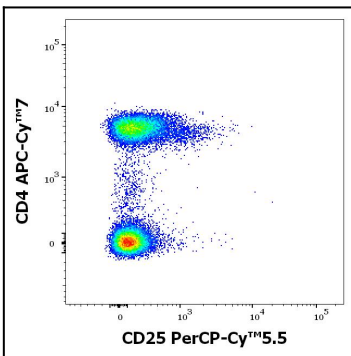


Figure 3: Flow cytometry multicolor surface staining pattern of human lymphocytes using anti-human CD25 (MEM-181) PerCP-Cy5.5 antibody (concentration in sample 0.5 µg/ml) and anti-human CD4 (MEM-241) APC-Cy7 antibody (4 µl reagent / 100 µl of peripheral whole blood).

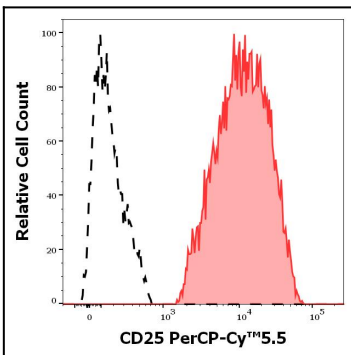


Figure 4: Separation of CD3 positive CD25 positive lymphocytes (red-filled) from CD3 negative CD25 negative lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human PHA stimulated peripheral whole blood stained using anti-human CD25 (MEM-181) PerCP-Cy5.5 antibody (concentration in sample 0.5 µg/ml).

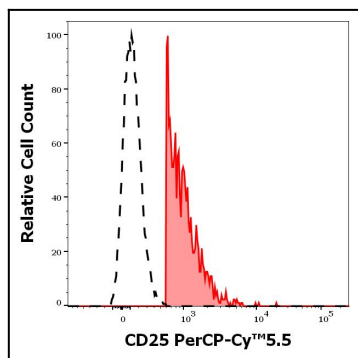


Figure 5: Separation of CD4 positive CD25 positive Treg cells (red-filled) from CD4 negative CD25 negative lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD25 (MEM-181) PerCP-Cy5.5 antibody (concentration in sample 0.5  $\mu\text{g/ml}$ ).