



PB-218-T025

## Monoclonal Antibody to CD25 Pacific Blue™ conjugated (25 tests)

<b>Clone:</b>	MEM-181
<b>Isotype:</b>	Mouse IgG1
<b>Specificity:</b>	The antibody MEM-181 reacts with 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. HLDA VI; WS Code NL N-L024
<b>Immunogen:</b>	PHA-activated peripheral blood leucocytes
<b>Species Reactivity:</b>	Human
<b>Preparation:</b>	The purified antibody is conjugated with Pacific Blue™; under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
<b>Storage Buffer:</b>	The reagent is provided in phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent.
<b>Storage / Stability:</b>	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label. Short-term exposure to room temperature should not affect the quality of the reagent. However, if reagent is stored under any conditions other than those specified, the conditions must be verified by the user.
<b>Usage:</b>	The reagent is designed for Flow Cytometry 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 (0.1 ml) is sufficient for 25 tests.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	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.

**For laboratory research only, not for drug, diagnostic or other use.**

**Antibodies****References:**

- \*Lai KN, Leung JC, Lai FM: Soluble interleukin 2 receptor release, interleukin 2 production, and interleukin 2 receptor expression in activated T-lymphocytes in vitro. *Pathology*. 1991 Jul;23(3):224-8.
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- \*Morris JC, Waldmann TA: Advances in interleukin 2 receptor targeted treatment. *Ann Rheum Dis*. 2000 Nov;59 Suppl 1:i109-14.
- \*Sotlar K, Horny HP, Simonitsch I, Krokowski M, Aichberger KJ, Mayerhofer M, Printz D, Fritsch G, Valent P: CD25 indicates the neoplastic phenotype of mast cells: a novel immunohistochemical marker for the diagnosis of systemic mastocytosis (SM) in routinely processed bone marrow biopsy specimens. *Am J Surg Pathol*. 2004 Oct;28(10):1319-25.
- \*Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).
- \*Drbal K, Moertelmaier M, Holzhauser C, Muhammad A, Fuertbauer E, Howorka S, Hinterberger M, Stockinger H, Schütz GJ: Single-molecule microscopy reveals heterogeneous dynamics of lipid raft components upon TCR engagement. *Int Immunol*. 2007 May;19(5):675-84.

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