

TECHNICAL DATA SHEET

CyFlow™ CD25 PerCP **Anti-Hu; Clone MEM-181**

REF BH857628

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

Specifications

Antigen	CD25
Alternative Names	TAC, p55, IL-2R
Clone	MEM-181
Clonality	monoclonal
Format	PerCP
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	PHA-activated peripheral blood leucocytes

Specificity

The mouse monoclonal antibody MEM-181 recognizes CD25 antigen, 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.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 10 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing 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

CD25 (IL2R α , Tac) is a ligand-binding α subunit of interleukin 2 receptor (IL2R). Together with β and γ 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.

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. < PMID: 1838146 >
- Scheibenbogen C, Keilholz U, Richter M, Andreesen R, Hunstein W: The interleukin-2 receptor in human monocytes and macrophages: regulation of expression and release of the alpha and beta chains (p55 and p75). Res Immunol. 1992 Jan; 143(1):33-7. < PMID: 1565844 >

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

- Kishimoto T, Goyert S, Kikutani H, Mason D, Miyasaka M, Moretta L, Ohno T, Okumura K, Shaw S, Springer TA, Sugamura K, Sugawara H, von dem Borne AEGK, Zola H (Eds): Leucocyte Typing VI. Garland Publishing Inc, New York. 1997; 1-1342. < NLM ID: 9712219 >
- Morris JC, Waldmann TA: Advances in interleukin 2 receptor targeted treatment. Ann Rheum Dis. 2000 Nov; 59(Suppl 1):i109-14. < PMID: 11053100 >
- 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. < PMID: 15371947 >
- Drbal K, Moertelmaier M, Holzhauser C, Muhammad A, Fuerthbauer 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. < PMID: 17446208 >

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

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com