TECHNICAL DATA SHEET

CyFlow™ CD6 PE

Anti-Hu; Clone MEM-98

REF **BL994465**

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD6
Alternative Names	T12
Clone	MEM-98
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	Human CD6 antigen purified by immunoaffinity chromatography from HBP-ALL cells followed by preparative SDS-PAGE of non-boiled non-reduced sample (excised piece of gel corresponding to the 100 kDa zone)

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

Specificity

The mouse monoclonal MEM-98 antibody recognizes CD6 antigen, a 100-130 kDa single chain transmembrane glycoprotein expressed on T and B lymphocytes subsets, thymocytes, and acute lymphocytic leukemia cells.

Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 20 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension. The content of a vial (2 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

CD6 (T12) is a member of the scavenger receptor superfamily found on T and B cell subsets, thymocytes, and acute lymphocytic leukemia cells (ALL). CD6 interacts with its ligand CD166 (ALCAM; activated leukocyte cell adhesion molecule) and serves as a coreceptor for T cell activation and stabilizer of the immunological synapse. CD6-ALCAM mediated cell adhesion is also important for T cell proliferation. CD6 may exert some its functions via association with CD5, probably by fine-tuning CD5 signaling. Ligation of CD6 has antiapoptotic role in chronic lymphocytic leukemia B cells.

References

- Bazil V, Horejsi V, Baudys M, Kristofova H, Strominger JL, Kostka W, Hilgert I: Biochemical characterization of a soluble form of the 53-kDa monocyte surface antigen. Eur J Immunol. 1986 Dec; 16(12):1583-9. < PMID: 3493149 >

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

- Osorio LM, De Santiago A, Aguilar-Santelises M, Mellstedt H, Jondal M: CD6 ligation modulates the Bcl-2/Bax ratio and protects chronic lymphocyticleukemia B cells from apoptosis induced by anti-IgM. Blood. 1997 Apr 15; 89(8):2833-41. < PMID: 9108402 >
- Zimmerman AW, Joosten B, Torensma R, Parnes JR, van Leeuwen FN, Figdor CG: Long-term engagement of CD6 and ALCAM is essential for T-cell proliferationinduced by dendritic cells. Blood. 2006 Apr 15; 107(8):3212-20. < PMID: 16352806 >
- Hassan NJ, Simmonds SJ, Clarkson NG, Hanrahan S, Puklavec MJ, Bomb M, Barclay AN, Brown MH: CD6 regulates T-cell responses through activation-dependent recruitment of the positive regulator SLP-76. Mol Cell Biol. 2006 Sep; 26(17):6727-38. < PMID: 16914752 >
- Castro MA, Oliveira MI, Nunes RJ, Fabre S, Barbosa R, Peixoto A, Brown MH, Parnes JR, Bismuth G, Moreira A, Rocha B, Carmo AM: Extracellular isoforms of CD6 generated by alternative splicing regulate targeting of CD6 to the immunological synapse. J Immunol. 2007 Apr 1; 178(7):4351-61. < PMID: 17371992 >

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