



A7-205-T025

Monoclonal Antibody to CD6 Alexa Fluor® 700 conjugated (25 tests)

Clone:	MEM-98
Isotype:	Mouse IgG1
Specificity:	The MEM-98 antibody reacts with CD6, a 100-130 kDa single chain transmembrane glycoprotein expressed on T and B lymphocytes subsets, thymocytes, and acute lymphocytic leukemia cells.
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).
Species Reactivity:	Human
Preparation:	The purified antibody is conjugated with Alexa Fluor® 700 under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Storage Buffer:	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.
Storage / Stability:	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.
Usage:	The reagent is designed for Flow Cytometry analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10 ⁶ cells in a suspension. The content of a vial (0.1 ml) is sufficient for 25 tests.
Expiration:	See vial label
Lot Number:	See vial label
Background:	CD6, also known as 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.

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

**Antibodies****References:**

- *Osorio LM, De Santiago A, Aguilar-Santelises M, Mellstedt H, Jondal M.: CD6 ligation modulates the Bcl-2/Bax ratio and protects chronic lymphocytic leukemia B cells from apoptosis induced by anti-IgM. *Blood*. 1997 Apr 15;89(8):2833-41.
- *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 proliferation induced by dendritic cells. *Blood*. 2006 Apr 15;107(8):3212-20. Epub 2005 Dec 13.
- *Bazil V. et al: Monoclonal antibodies against human leucocyte antigens. III. Antibodies against CD45R, CD6, CD44 and two newly described broadly expressed glycoproteins MEM-53 and MEM-102. *Folia Biol. (Praha)* 35, 35 (1989).
- *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.
- *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.

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