# Monoclonal Antibody to CD44 Allophycocyanin (APC) conjugated (100 tests) 

| Clone: | MEM-263 |
| :---: | :---: |
| Isotype: | Mouse IgG1 |
| Specificity: | The antibody MEM-263 reacts with extracellular (N-terminal) domain of standard CD44 (Phagocyte glycoprotein 1), a 80-95 kDa transmembrane glycoprotein (hyaladherin family) present on the most of cells and tissues (leukocytes, endothelial cells, mesenchymal cells, etc.); it is negative on platelets and hepatocytes. <br> HLDA III; WS Code T 155 |
| Regulatory Status: | RUO |
| Immunogen: | COS-7 cells (African Green Monkey). |
| Species Reactivity: | Human, Porcine, Canine (Dog) |
| Preparation: | The purified antibody is conjugated with cross-linked Allophycocyanin (APC) 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 stabilizing phosphate buffered saline (PBS) solution containing 15 mM sodium azide. |
| Storage / Stability: | Store in the dark at $2-8^{\circ} \mathrm{C}$. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label. |
| Usage: | The reagent is designed for Flow Cytometry analysis of human blood cells using $10 \mu \mathrm{l}$ reagent / $100 \mu \mathrm{l}$ of whole blood or $10^{6}$ cells in a suspension. The content of a vial ( 1 ml ) is sufficient for 100 tests. |
| Expiration: | See vial label |
| Lot Number: | See vial label |
| Background: | CD44 is a transmembrane glycoprotein expressed on the surface of most cells, which serves as a receptor for hyaluronan. CD44 mediates angiogenesis, cell adhesion, proliferation and migration, it is thus important for lymphocyte activation, recirculation and homing, it can thus serve e.g. as a modulator of macrophage recruitment in response to pathogen. Although CD44 functions are essential for physiological activities of normal cells, elevated CD44 expression correlates with poor prognosis in many carcinomas, facilitating tumour growth and metastasis, antiapoptosis and directional motility of cancer cells. |

## References:

*Vigetti D, Viola M, Karousou E, Rizzi M, Moretto P, Genasetti A, Clerici M, Hascall VC, De Luca G, Passi A: Hyaluronan-CD44-ERK1/2 regulate human aortic smooth muscle cell motility during aging. J Biol Chem. 2007 Dec 12
*Hollingsworth JW, Li Z, Brass DM, Garantziotis S, Timberlake SH, Kim A, Hossain I, Savani RC, Schwartz DA. CD44 regulates macrophage recruitment to the lung in lipopolysaccharide-induced airway disease. Am J Respir Cell Mol Biol. 2007 Aug;37(2):248-53.
*Liu J, Bi G, Wen P, Yang W, Ren X, Tang T, Xie C, Dong W, Jiang G. Down-regulation of CD44 contributes to the differentiation of HL-60 cells induced by ATRA or HMBA. Cell Mol Immunol. 2007 Feb;4(1):59-63.
*Subramaniam V, Gardner H, Jothy S: Soluble CD44 secretion contributes to the acquisition of aggressive tumor phenotype in human colon cancer cells. Exp Mol Pathol. 2007 Dec;83(3):341-6.
*Subramaniam V, Vincent IR, Gardner H, Chan E, Dhamko H, Jothy S: CD44 regulates cell migration in human colon cancer cells via Lyn kinase and AKT phosphorylation. Exp Mol Pathol. 2007 Oct;83(2):207-15.
*Leukocyte Typing III., McMichael A.J. et al. (Eds.), Oxford University Press (1987).

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