

Monoclonal Antibody to CD44 - PE

Alternate names: CDw44, ECMR-III, Epican, Extracellular matrix receptor III, GP90 lymphocyte

homing/adhesion receptor, HUTCH-I, Heparan sulfate proteoglycan, Hermes antigen, Hyaluronate receptor, LHR, MDU2, MDU3, MIC4, PGP-1, Phagocytic glycoprotein 1

Catalog No.: SM3024R Quantity: 100 Tests

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.

Uniprot ID: P16070

NCBI: NP 000601.3

GenelD: <u>960</u>

Host / Isotype: Mouse / IgG1 Clone: MEM-263

Immunogen: COS-7 cells (African Green Monkey)

Format: State: Liquid purified Ig fraction

Buffer System: 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

Label: PE – Conjugated with R-Phycoerythrin under optimum conditions. The conjugate is

purified by size-exclusion chromatography and adjusted for direct use

Applications: Flow Cytometry analysis of human blood cells using 20 µl reagent / 100 µl of whole blood

or 10e6 cells in a suspension.

The content of a vial (2 ml) is sufficient for 100 tests.

Other applications not tested. Optimal dilutions are dependent on conditions and should

be determined by the user.

Specificity: This antibody 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.

Species Reactivity: Tested: Human, Porcine, Canine (Dog)



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Storage:

Store the antibody at 2 - 8 °C. DO NOT FREEZE! This product is photosensitive and should be protected from light.

Shelf life: one year from despatch.

- General References: 1. 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
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 - 3. 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.
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 - 5. 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.
 - 6. Leukocyte Typing III., McMichael A.J. et al. (Eds.), Oxford University Press (1987).