



1B-624-C100

## Monoclonal Antibody to CD44 Biotin conjugated (0.1 mg)

Clone: IM7

Isotype: Rat IgG2b

Specificity: The rat monoclonal antibody IM7 reacts with CD44 antigen (Phagocyte

glycoprotein 1), an 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. The antibody

reacts with all isoforms of mouse CD44.

Regulatory Status: RUO

Immunogen: Dexamethasone-induced cells of the SJL mouse spontaneous myeloid leukemia

M1

Species Reactivity: Human, Mouse, Canine (Dog), Equine (Horse), Feline (Cat)

**Preparation:** The purified antibody is conjugated with Biotin-LC-NHS under optimum conditions.

The reagent is free of unconjugated biotin.

Concentration: 1 mg/ml

Storage Buffer: Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4

Storage / Stability: Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial

label.

**Usage:** Biotinylated antibody is designed for Flow Cytometry analysis.

**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. 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.



## PRODUCT DATA SHEET

## References:

\*Lesley J, Trowbridge IS: Genetic characterization of a polymorphic murine cell-surface glycoprotein. Immunogenetics. 1982 Mar;15(3):313-20.

\*Hegde VL, Singh NP, Nagarkatti PS, Nagarkatti M: CD44 mobilization in allogeneic dendritic cell-T cell immunological synapse plays a key role in T cell activation. J Leukoc Biol. 2008 Jul;84(1):134-42.

\*van Royen N, Voskuil M, Hoefer I, Jost M, de Graaf S, Hedwig F, Andert JP, Wormhoudt TA, Hua J, Hartmann S, Bode C, Buschmann I, Schaper W, van der Neut R, Piek JJ, Pals ST: CD44 regulates arteriogenesis in mice and is differentially expressed in patients with poor and good collateralization. Circulation. 2004 Apr 6;109(13):1647-52.

\*McKallip RJ, Do Y, Fisher MT, Robertson JL, Nagarkatti PS, Nagarkatti M: Role of CD44 in activation-induced cell death: CD44-deficient mice exhibit enhanced T cell response to conventional and superantigens. Int Immunol. 2002 Sep;14(9):1015-26.

\*Katoh S, Matsumoto N, Kawakita K, Tominaga A, Kincade PW, Matsukura S: A role for CD44 in an antigen-induced murine model of pulmonary eosinophilia. J Clin Invest. 2003 May;111(10):1563-70.

\*Legg JW, Lewis CA, Parsons M, Ng T, Isacke CM: A novel PKC-regulated mechanism controls CD44 ezrin association and directional cell motility. Nat Cell Biol. 2002 Jun;4(6):399-407.

\*Si-Tahar M, Sitaraman S, Shibahara T, Madara JL: Negative regulation of epithelium-neutrophil interactions via activation of CD44. Am J Physiol Cell Physiol. 2001 Mar;280(3):C423-32.

\*Larkin J, Renukaradhya GJ, Sriram V, Du W, Gervay-Hague J, Brutkiewicz RR: CD44 differentially activates mouse NK T cells and conventional T cells. J Immunol. 2006 Jul 1;177(1):268-79.

\*Xu H, Manivannan A, Liversidge J, Sharp PF, Forrester JV, Crane IJ: Involvement of CD44 in leukocyte trafficking at the blood-retinal barrier. J Leukoc Biol. 2002 Dec;72(6):1133-41.

\*And many other.

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