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Product datasheet for CL024P

Cd44 Rat Monoclonal Antibody [Clone ID: IM7.8.1]

Product data:

Product Type:	Primary Antibodies
Clone Name:	IM7.8.1
Applications:	ELISA, FC, IHC, IP, WB
Recommended Dilution:	**Flow Cytometry.** **Immunohistochemistry on Frozen Sections.** **Immunohistochemistry on Paraffin** (2.5-10 µg/ml). This clone is also reported to work in Immunoprecipitation, ELISA, and complement depletion (1,2,3).
Reactivity:	Mouse
Host:	Rat
Isotype:	IgG2b
Clonality:	Monoclonal
Specificity:	This antibody reacts with all isoforms of CD44 (also known as Pgp, Ly-24) as well as both Ly-24.1 and Ly-24.2 (1,4). By Flow Cytometry, the main cellular reactivities are B cells, monocytes, macrophages and variable subsets of thymocytes and peripheral T cells.
Formulation:	PBS State: Purified State: Liquid purified IgG fraction Preservative: 0.05% Sodium Azide
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Database Link:	Entrez Gene 12505 Mouse P15379

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Background: CD44 is a type 1 transmembrane glycoprotein also known as Phagocytic Glycoprotein 1 (pgp 1) and HCAM. CD44 is the receptor for hyaluronate and exists as a large number of different isoforms due to alternative RNA splicing. The major isoform expressed on lymphocytes, myeloid cells, and erythrocytes is a glycosylated type 1 transmembrane protein. Other isoforms contain glycosaminoglycans and are expressed on hematopoietic and non hematopoietic cells. CD44 is involved in adhesion of leukocytes to endothelial cells, stromal cells, and the extracellular matrix.

Synonyms: LHR, MDU2, MDU3, MIC4, CDw44, Epican, ECMR-III, HUTCH-I, Heparan sulfate proteoglycan, Hermes antigen, Hyaluronate receptor, PGP-1

Note: Protocol: **Flow Cytometry Analysis:**

Method:

1. Prepare a cell suspension in media A. For cell preparations, deplete the red blood cell population with a cell separation medium.
2. Wash 2 times.
3. Resuspend the cells to a concentration of $2x10^7$ cells/ml in media A. Add 50 µl of this suspension to each tube (each tube will then contain $1x10^6$ cells, representing 1 test).
4. To each tube, add ~1.0 µg* of CL024P.
5. Vortex the tubes to ensure thorough mixing of antibody and cells.
6. Incubate the tubes for 30 minutes at 4°C.
7. Wash 2 times at 4°C.
8. Add 100 µl of a secondary antibody (f.e. FITC Goat anti-rat IgG (H+L) at 1:500 dilution).
9. Incubate the tubes at 4°C for 30-60 minutes. (protect from light since most fluorochromes are light sensitive).
10. Wash 2 times at 4°C in media B.
11. Resuspend the cell pellet in 50 µl ice cold media B.
12. Transfer to suitable tubes for flow cytometric analysis containing 15 µl of propidium iodide at 0.5 mg/ml in PBS. This stains dead cells by intercalating in DNA.

Media:

A. Phosphate buffered saline (pH 7.2) + 5% normal serum of host species + sodium azide (100 µl of 2M sodium azide in 100 mls).
B. Phosphate buffered saline (pH 7.2) + 0.5% Bovine serum albumin + sodium azide (100 µl of 2M sodium azide in 100 mls).

N.B. Appropriate control samples should always be included in any labelling studies.