



CD44 Antibody [IM7] (Violet-450)

CATALOG NUMBER: 76-412

Specifications

SPECIES REACTIVITY:	Human, Mouse
TESTED APPLICATIONS:	FACS
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
SPECIFICITY:	The IM7 monoclonal antibody specifically reacts with all the isoforms and both alloantigens of the CD44 glycoprotein (Pgp-1, Ly-24).
HOST SPECIES:	Rat

Properties

PURIFICATION:	The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.
PHYSICAL STATE:	liquid
BUFFER:	Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, pH7.2.
CONCENTRATION:	0.2 mg/mL
STORAGE CONDITIONS:	The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze.
CLONALITY:	Monoclonal
ISOTYPE:	Rat IgG2b, kappa
CONJUGATE:	Violet-450

Additional Info

ALTERNATE NAMES:	IN, LHR, MC56, MDU2, MDU3, MIC4, Pgp1, CDW44, CSPG8, HCELL, HUTCH-I, ECMR-III, Ly-24, Pgp-1, HERMES, AU023126, AW121933, AW146109, CD44
OFFICIAL SYMBOL:	CD44
GENE ID:	960; 12505

Background

BACKGROUND:	The IM7 monoclonal antibody specifically reacts with all the isoforms and both alloantigens of the CD44 glycoprotein (Pgp-1, Ly-24). CD44 is expressed on hematopoietic and non-hematopoietic cells, bone marrow myeloid cells, memory T lymphocytes, periphery activated B cells, CD4+ T lymphocytes, and CD8+ T lymphocytes. The periphery B and T lymphocytes upregulate the expression of CD44. CD44 binds to hyaluronan molecules, acting as an adhesion molecule. The IM7 antibody inhibits collagen-induced arthritis in DBA/1 mice, prevents central nervous system inflammation associated with experimental autoimmune encephalomyelitis, but exacerbates the experimental autoimmune thyroiditis in CBA/J mice. The IM7 antibody also cross-reacts with dog, human, pig, horse, cat, and cow leukocytes. BG Violet 450 conjugate is an alternative to the Pacific Blue, eFluor 450, or BD Horizon V450 dyes. It is excited by the violet (405 nm) laser, with a peak emission of 450nm.
REFERENCES:	1) Trowbridge, I. S., Lesley, J., Schulte, R., Hyman, R., Trotter, J. (1982). Biochemical characterization and cellular distribution of a polymorphic, murine cell-surface glycoprotein expressed on lymphoid tissues. <i>Immunogenetics</i> , 15(3), 299-312.

2) Lesley, J., Trowbridge, I. S. (1982). Genetic characterization of a polymorphic murine cell-surface glycoprotein. *Immunogenetics*, 15(3), 313-320.

3) Nedvetzki, S., Walmsley, M., Alpert, E., Williams, R. O., Feldmann, M., Naor, D. (1999). CD44 involvement in experimental collagen-induced arthritis (CIA). *Journal of autoimmunity*, 13(1), 39-47.

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