

Anti-Human/Mouse CD44 FITC

Catalog Number :06511-50

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Clone: IM7

Format/Conjugate: FITC

Concentration: 0.5 mg/mL

Reactivity: Human, Mouse

Laser: Blue (488nm)

Peak Emission: 520nm

Peak Excitation: 494nm

Filter: 530/30

Brightness (1=dim,5=brightest): 3

Isotype: Rat IgG2b, kappa

Formulation: Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, pH7.2.

Storage: Product should be kept at 2-8°C and protected from prolonged exposure to light.

Applications: FC

Description

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.

Preparation & Storage

The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.

Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. For flow cytometric staining, the suggested use of this reagent is ≤0.5 ug per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

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.; *Immunogenetics*, 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.