

TECHNICAL DATA SHEET

PE-Cyanine7 Anti-Human CD38 (HB7)

Catalog Number: 60-0388

PRODUCT INFORMATION

Contents: PE-Cyanine7 Anti-Human CD38 (HB7)

Isotype: Mouse IgG1, kappa

Concentration: 5 μ L (0.5 μ g)/test

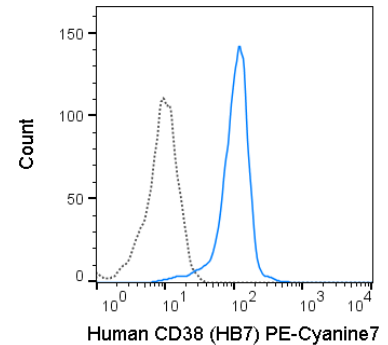
Clone: HB7

Reactivity: Human

Use By: 6 months from date of receipt

Storage Conditions: 2-8°C protected from light

Formulation: 10 mM NaH₂PO₄, 150 mM NaCl, 0.09% NaN₃, 0.1% gelatin, pH7.2



Human peripheral blood monocytes were stained with 5 μ L (0.5 μ g) PE-Cyanine7 Anti-Human CD38 (60-0388) (solid line) or 0.5 μ g PE-Cyanine7 Mouse IgG1 isotype control (dashed line).

DESCRIPTION

The HB7 antibody is specific for human CD38, a 45 kDa type II transmembrane glycoprotein expressed on thymocytes, plasma cells, and monocytes as well as other non-hematopoietic cells. T and B lymphocyte expression is discontinuous and varies based on differentiation state - present on immature cells, low on intermediate stages, and high on activated mature cells. It is found on most CD34+ cells, but not on pluripotent stem cells. CD38 is an ectoenzyme that functions to catalyze the synthesis and hydrolysis of cyclic ADP-ribose and is involved in cell signaling, regulating cell adhesion, and activation. Additionally, CD38 has been shown to be a prognostic marker for some leukemias and other diseases.

PREPARATION & STORAGE

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

APPLICATION NOTES

This antibody preparation has been pre-titrated and quality-tested for flow cytometry using an appropriate cell type. The antibody has been diluted for use at 5 μ L per test, defined as the amount of antibody that will stain a cell sample in a final volume of approximately 100 μ L. The number of cells within a sample should be determined empirically, but typically ranges between 1x10⁵ to 1x10⁸ cells.

REFERENCES

- Tedder TF, Clement LT and Cooper MD. 1984. Tissue Antigens. 24(3): 140-149. (Flow cytometry)
 Jackson DG and Bell JI. 1990. J Immunol. 144(7): 2811-2815.
 Mahta K, Shahid U and Malavasi F. 1996. FASEB J. 10(12): 1408-1417.
 Ferrero E and Malavasi F. 1999. J Leukoc Biol. 65(2): 151-161.
 Llinas L, Lazaro A, de Saolrt J, Matesanz-Isabel J, Sintes J and Engel P. 2011. Immunol Lett. 134(2): 113-121. (Flow cytometry)

Tonbo Biosciences tests all antibodies by flow cytometry. Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

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