# Anti-Human CD38 (HB7)



\∎/	REF	$\sum_{i=1}^{n}$	
FITC	38F2-100T	100 test	
PE	38PE2-100T	100 test	
APC	38A2-100T	100 test	RUO
APC-C750	38AC7502-100T	100 test	

### PRODUCT DESCRIPTION

Clone: HB7;

1.

- Isotype: IgGl, k;
- Tested application: flow cytometry;
- Immunogen: The anti-CD38 monoclonal antibody derives from BJAB human B cell line;
- Species reactivity: Human;
- Storage instruction: store in the dark at 2-8 °C;
- Storage buffer: aqueous buffered solution containing protein stabilizer and 0.09% sodium azide (NaN<sub>4</sub>);
- Recommended usage: Immunostep's CD38, clone HB7, is a monoclonal antibody intended for the identification and enumeration of plasma cells using flow cytometry. This reagent is effective for direct immunofluorescence staining of human tissue for flow cytometric analysis using I test for IO<sup>6</sup> cells;
- Presentation: liquid;
- Source: Supernatant proceeding from an in vitro cell culture of a cell hybridoma;
- Purification: Affinity chromatography;
- Other names: TIO, ADPribosyl cyclase, and cyclic ADP ribose hydrolase 1;
  Gene ID: 952:
- Gene ID: 952;
  Molecular weight: 45 kDa.

# 2. ANTIGEN DETAILS

Large description: The HB7 monoclonal antibody reacts with the human CD38 molecule, a type II transmembrane protein. Expression of CD38 is bimodal during B cell development, modulating from high in immature cells to low in intermediate ones and back to high on mature B cells. Additionally CD38 is found in a variety of tissues and other hematopoietic cell.

The CD38 antigen acts as a bifunctional ectoenzyme that catalyzes both the synthesis and the hydrolysis of a Ca++ mobilizing agent, cyclic ADP-ribose. This intracellular calcium plays an important role in cell signaling pathways.<sup>[1-4]</sup>

## 3. WARRANTY

Warranted only to conform to the quantity and contents stated on the label or in the product labelling at the time of delivery to the customer. Immunostep disclaims hereby other warranties.

Immunostep's sole liability is limited to either the replacement of the products or refund of the purchase price.

## 4. ADDITIONAL INFORMATION

For research use only. Not for diagnostic use.

Not for resale. Immunostep will not be responsible of violations that may occur with the use of this product. Any use of this product other than the specified in this document is strictly prohibited.

Unless otherwise indicated by Immunostep by written authorization, this product is intended for research only and is not to be used for any other purpose, including without limitation, for human or animal diagnostic, therapeutic or commercial purposes.

Please, refer to www.immunostep.com technical support for more information.

## 5. REFERENCES

- Reinherz EL, Kung PC, Goldstein G, Levey RH, Schlossman SF. Discrete stages of human intrathymic differentiation: analysis of normal thymocytes and leukemic lymphoblasts of T-cell lineage. Proc Natl Acad Sci U S A1980 Mar;77(3):1588-92.
- Knapp W. Leucocyte typing IV : white cell differentiation antigens. Oxford: Oxford University Press; 1989.
- Jackson DG, Bell JI. Isolation of a cDNA encoding the human CD38 (TI0) molecule, a cell surface glycoprotein with an unusual discontinuous pattern of expression during lymphocyte differentiation. J Immunol1990 Apr 1;144(7):2811-5.
- Terstappen LW, Huang S, Safford M, Lansdorp PM, Loken MR. Sequential generations of hematopoietic colonies derived from single nonlineage-committed CD34+CD38progenitor cells. Blood1991 Mar 15;77(6):1218-27.

### 6. EXPLANATION OF SYMBOLS

<b>∖</b> ∎∕	Fluorochrome
REF	Product reference
$\sum_{i=1}^{n}$	Content for <n> analysis</n>
	Regulatory Status
RUO	Research Use Only
AAA	Manufacturer

MANUFACTURED BY: IMMUNOSTEP S.L.

7.



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