

30-2942PE: Anti-Human CD38 Monoclonal Antibody PE Conjugated (Clone: HB7)

Clonality :	Monoclonal
Clone Name :	HB7
Application :	FACS
Reactivity :	Human
Conjugate :	PE
Gene :	CD38
Gene ID :	952
Uniprot ID :	P28907
Alternative Name :	ADPRC1, cADPr hydrolase 1, T10, NAD(+) nucleosidase, ADP-ribosyl cyclase 1
Isotype :	Mouse IgG1 kappa
Immunogen Information :	BJAB cell line

Description

Specificity: The mouse monoclonal antibody HB7 (HB-7) recognizes an extracellular epitope within amino acids 273-285 of human CD38, a 45 kDa type II transmembrane glycoprotein strongly expressed mainly on plasma cells and activated T and B lymphocytes; it is an antigenic marker of lymphoid cells. Its binding is blocked by daratumumab.

Background: CD38 (NAD⁺ glycohydrolase) is a type II transmembrane glycoprotein able to induce activation, proliferation and differentiation of mature lymphocytes and mediate apoptosis of myeloid and lymphoid progenitor cells. Another role of CD38 is provided by enzymatic activity of its extracellular part. CD38 acts as NAD⁺ glycohydrolase converting NAD⁺ into ADP-ribose, as ADP-ribosyl cyclase producing cADPR and as cADPR hydrolase, thus affecting levels of calcium-mobilizing metabolites. ADPR produced by CD38 serves as an important second messenger of neutrophil and dendritic cell migration. CD38 belongs to markers of B cell subsets, leukemia, and a target of immunotherapy in myeloma treatment.

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Product Info

Amount :	100 tests
Purification :	Purified antibody is conjugated with R-phycoerythrin (PE) under optimum conditions. Unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

Content : Formulation: Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Storage condition : Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Application Note

Flow cytometry: The reagent is designed for analysis of human blood cells using 10 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.