

PacBlue Anti-human CD38 Antibody *HB7*Catalog number: 103821I0, 103821I1
Unit size: 100 tests, 500 tests**Product Details**

Storage Conditions	2-8°C with minimized light exposure. Do not freeze.
Expiration Date	12 months upon receiving
Concentration	0.1 mg/mL
Formulation	Phosphate-buffered saline (PBS, pH 7.2), 0.09% sodium azide, 0.2% (w/v) BSA

Antibody Properties

Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG1, κ
Immunogen	CD38 (ADP-ribosyl cyclase, T10)
Clone	HB7
Conjugate	PacBlue

Biological Properties

Appearance	Light yellow liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with PacBlue under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	PacBlue
Excitation Wavelength	404 nm
Emission Wavelength	455 nm

Applications

HB7 is an anti-human monoclonal antibody that recognizes the CD38 antigen. CD38 (alternatively called ADP-ribosyl cyclase or T10) is a 45 kD transmembrane glycoprotein that is expressed on the surface of cells such as B cells, dendritic cells and macrophages. CD38 is a component of critical cellular pathways, for instance, the apoptotic signaling pathway and B cell receptor signaling pathway. In addition, in many organisms, it is a repressor of bone resorption, is involved in the positive regulation of cell growth and is involved in the positive regulation of

vasoconstriction. From a research standpoint, it is of biological interest due to its association with essential macromolecules/ligands such as hyaluronic acid and CD16. CD38 is a moderately popular antibody target, with over 15000 publications in the last decade. CD38 is typically used in flow cytometry applications as a phenotypic marker for differentiation of cell types, specifically in the study of immunology. This antibody was purified through affinity chromatography and conjugated to PacBlue (ex/em = 404/455 nm). It is compatible with the 405 nm laser and 450/45 nm bandpass filter (for example, as in the Luminex Guava easyCyte).