

PacBlue Anti-human CD38 Antibody *HIT2*Catalog number: 103801J0, 103801J1
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
Immunogen	CD38 (ADP-ribosyl cyclase, T10)
Clone	HIT2
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

HIT2 is an anti-human monoclonal antibody that targets the CD38 antigen. CD38 (alternatively called T10) is a 45 kD transmembrane protein that is found on the surface of cells such as NK cells, macrophages and stem cells. CD38 is a component of vital cellular pathways, namely, the apoptotic signaling pathway and B cell receptor signaling pathway. In addition, in certain organisms, it represses apoptotic process, is a positive regulator of cell growth and is an enhancer of vasoconstriction. From a research standpoint, it is of biological interest due to its association with

critical macromolecules/ligands like HLA Class II, CD31, CD16 and Hyaluronic acid. CD38 is a fairly uncommon antibody target, with a little more than 10000 publications in the last decade. Even still, CD38 has been widely used in immunology research, commonly serving as a phenotypic marker for differentiating cell types in flow cytometric applications. 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 450/50 nm bandpass filter (for example, as in the BD FACSAria™ III).