

iFluor™ 450 Anti-human CD38 Antibody
HIT2Catalog number: 10380040, 10380041
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	iFluor™ 450

Biological Properties

Appearance	Brown liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with iFluor™ 450 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	iFluor™ 450
Excitation Wavelength	451 nm
Emission Wavelength	502 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 iFluor™ 450 (ex/em = 451/502 nm). It is compatible with the 445 nm laser and 510/80 nm bandpass filter (for example, as in the BD FACSAria™ Fusion).