

mFluor™ UV460 Anti-human CD38 Antibody
HI157Catalog number: 103810Y0, 103810Y1
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 IgG2a
Immunogen	CD38 (ADP-ribosyl cyclase, T10)
Clone	HI157
Conjugate	mFluor™ UV460

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with mFluor™ UV460 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	mFluor™ UV460
Excitation Wavelength	358 nm
Emission Wavelength	456 nm

Applications

The HI157 monoclonal antibody binds to human CD38, a 45 kD transmembrane glycoprotein typically found on the surface of plasma cells, dendritic cells and myeloids. CD38 acts in important cellular pathways, in particular, the B cell receptor signaling pathway and apoptotic signaling pathway. Also, in many organisms, it acts to positively regulate vasoconstriction, acts to positively regulate cell growth and is a positive regulator of insulin secretion. From a research standpoint, it is of biological interest due to its association with essential macromolecules/ligands such as CD3/TcR complex, HLA Class II, Hyaluronic acid and CD31. CD38 is a fairly uncommon antibody target, with a little more than 10000

publications in the last decade. Even still, CD38 is often 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 mFluor™ UV460 (ex/em = 358/456 nm). It is compatible with the 355 nm laser and 447/60 nm bandpass filter (for example, as in the Bio-Rad ZE5 Cell Analyzer).