iFluor™ 568 Anti-human CD38 Antibody *HI157*

Catalog number: 103810B0, 103810B1
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	iFluor™ 568

Biological Properties

Appearance	Purple liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with iFluor™ 568 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	iFluor™ 568
Excitation Wavelength	568 nm
Emission Wavelength	587 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 iFluor™ 568 (ex/em = 568/587 nm). It is compatible with the 561 nm laser and 577/15 nm bandpass filter (for example, as in the Bio-Rad ZE5 Cell Analyzer).