

**XFD680 Anti-human CD38 Antibody *HI157,
XFD680 Same Structure to Alexa Fluor™
680***Catalog number: 10381190, 10381191
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	AF680

Biological Properties

Appearance	liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF680 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	AF680
Excitation Wavelength	681 nm
Emission Wavelength	704 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 XFD680 (ex/em = 681/704 nm). XFD680 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 680 (Alexa Fluor® is the trademark of ThermoFisher). It is compatible with the 642 nm laser and 702/87 nm bandpass filter (for example, as in the Luminex Amnis CellStream).