

**XFD488 Anti-human CD38 Antibody \*HI157,  
XFD488 Same Structure to Alexa Fluor™  
488\***Catalog number: 10381150, 10381151  
Unit size: 100 tests, 500 tests**Product Details**

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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**

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Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG2a
Immunogen	CD38 (ADP-ribosyl cyclase, T10)
Clone	HI157
Conjugate	AF488

**Biological Properties**

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Appearance	Red liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF488 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

**Spectral Properties**

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Conjugate	AF488
Excitation Wavelength	499 nm
Emission Wavelength	520 nm

**Applications**

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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 XFD488 (ex/em = 499/520 nm). XFD488 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 488 (Alexa Fluor® is the trademark of ThermoFisher). It is compatible with the 488 nm laser and 530/40 nm bandpass filter (for example, as in the BD FACSJazz™).