

## XFD555 Anti-human CD38 Antibody \*HIT2\*

Catalog Number: 10380160, 10380161

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	Lot specific (please consult certificate of analysis for given lot)
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 IgG1
Immunogen	CD38 (ADP-ribosyl cyclase, T10)
Clone	HIT2
Conjugate	AF555

### Biological Properties

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Appearance	Red liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF555 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging
Recommended Dilutions	For flow cytometry applications, the suggested concentration is at 5 uL/million cells in 100 uL staining buffer. For the best performance of each application, the optimal concentration of this reagent needs to be carefully determined.
	<i>*The suggested working dilution is provided as a guide only. It is recommended that the users titrates the product for use in their tests using proper positive and negative controls.</i>

### Spectral Properties

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Conjugate AF555

Excitation Wavelength 553 nm

Emission Wavelength 568 nm

## Applications

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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 XFD555 (ex/em = 553/568 nm). XFD555 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 555 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 561 nm laser and 582/15 nm bandpass filter (for example, as in the BD FACSAria™ Fusion).