

## XFD700 Anti-human CD138 Antibody \*MI15\*

Catalog Number: 113801A0, 113801A1

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	CD138 (Syndecan-1)
Clone	MI15
Conjugate	AF700

### Biological Properties

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Appearance	Dark blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF700 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                    AF700

Excitation Wavelength   696 nm

Emission Wavelength    719 nm

## Applications

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The MI15 monoclonal antibody reacts with human CD138, a 100 - 200 kD transmembrane protein typically expressed on the surface of b cells, plasma cells, epithelial cells and endothelial cells. CD138 is involved with important cellular pathways, in particular, the cytokine-mediated signaling pathway and canonical Wnt signaling pathway. Also, in certain organisms, it enhances extracellular exosome assembly and is a promoter of exosomal secretion. From a research standpoint, it is of biological interest due to its association with critical macromolecules/ligands such as Fibronectin. CD138 is a fairly uncommon antibody target, with a little more than 7000 publications in the last decade. Even still, CD138 is frequently used in flow cytometry applications as a phenotypic marker for differentiation of cell types, specifically in the study of cell motility/cytoskeleton/structure, cell biology and synaptic biology. This antibody was purified through affinity chromatography and conjugated to XFD700 (ex/em = 696/719 nm). XFD700 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 700 (Alexa Fluor® is the trademark of Thermo Fisher).