

## XFD680 Anti-human CD107 Antibody \*H4B4\*

Catalog Number: 11071180, 11071181

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 kappa
Immunogen	CD107b (LAMP2, LAMPb)
Clone	H4B4
Conjugate	AF680

### Biological Properties

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Appearance	Blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF680 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 AF680  
Excitation Wavelength 681 nm  
Emission Wavelength 704 nm

## Applications

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H4B4 is an anti-human monoclonal antibody that targets the CD107b antigen. CD107b (sometimes called LAMP2 or LAMPb) is a 45 kD transmembrane protein that is found on the surface of cells like granulocytes and endothelial cells. In many organisms, CD107 is a suppressor of protein-containing complex assembly. Additionally, it has been associated with essential biological processes like chaperone-mediated autophagy, particularly protein targeting to lysosome involved in chaperone-mediated autophagy. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands. CD107 is a relatively rare antibody target, with fewer than 800 publications in the last decade. Even still, CD107b is typically used in flow cytometry applications as a phenotypic marker for differentiation of cell types, specifically in the study of protein trafficking and clearance and neuroscience. 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 a chemical structure similar to that of Alexa Fluor® 680 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 642 nm laser and 702/85 nm bandpass filter (for example, as in the Luminex Amnis ImageStream).