PE/XFD610 Anti-human CD107 Antibody *H4B4*

Catalog Number: 110711N0, 110711N1, 110711N2
Unit Size: 25 tests, 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	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

Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG1 kappa
Immunogen	CD107b (LAMP2, LAMPb)
Clone	H4B4
Conjugate	PE/AF610

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with PE/AF610 under optimal conditions
Application	Flow Cytometry (FACS)
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. **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.*

Spectral Properties

Conjugate	PE/AF610

Excitation Wavelength	565 nm
Emission Wavelength	627 nm

Applications

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 PE/XFD610 (ex/em = 567/627 nm). XFD610 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 610 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 561 nm laser and 610/20 nm bandpass filter (for example, as in the BD Special Order LSRFortessa™ Cell Analyzer).