APC/XFD750 Anti-human CD109 Antibody *W7C5*

Catalog Number: 110901D0, 110901D1, 110901D2
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
Immunogen	CD109 (CPAMD7, Gov platelet alloantigen)
Clone	W7C5
Conjugate	APC/AF750

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with APC/AF750 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	APC/AF750

Excitation Wavelength	651 nm
Emission Wavelength	785 nm

Applications

The W7C5 monoclonal antibody binds with human CD109, a 162 kD transmembrane protein typically expressed on the surface of T cells and T cell lines. CD109 acts in essential cellular pathways, for instance, the negative regulation of transforming growth factor beta receptor signaling pathway. Additionally, in some organisms, it is a suppressor of transforming growth factor beta receptor signaling pathway, is a repressor of wound healing and is a repressor of keratinocyte proliferation. From a research standpoint, it is of biological interest due to its association with critical macromolecules/ligands. CD109 is a relatively rare antibody target, with fewer than 600 publications in the last decade. Even still, CD109 is vital to immunology research, frequently serving as a phenotypic marker for differentiating cell types in flow cytometric applications. This antibody was purified through affinity chromatography and conjugated to APC/XFD750 (ex/em = 756/785 nm). XFD750 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 750 (Alexa Fluor® is the trademark of Thermo Fisher).