

XFD680 Anti-human CD109 Antibody *W7C5*

Catalog Number: 11090180, 11090181

Unit Size: 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	AF680

Biological Properties

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

Conjugate	AF680
Excitation Wavelength	681 nm
Emission Wavelength	704 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 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 702/87 nm bandpass filter (for example, as in the Luminex Amnis CellStream).