APC/XFD750 Anti-non-human primates/ human CD49b Antibody *AK7*

Catalog Number: 104911E0, 104911E1, 104911E2
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	Non-human primates, human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG1
Immunogen	CD49b (Integrin alpha-2, VLA-2 subunit alpha, ITGA2, α2 integrin, VLA-2 α chain, Integrin α2 chain)
Clone	AK7
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 AK7 monoclonal antibody reacts with non-human primates/ human CD49b, a 170 kD member of the Integrin alpha chain family commonly located on the surface of activated T cells, B cells and monocytes. In some organisms, CD49b plays a role in the upregulation of alkaline phosphatase activity, is involved in the positive regulation of translation and is a promoter of epithelial cell migration. Additionally, it plays a role in essential cellular pathways, for example, the integrin-mediated signaling pathway and collagen-activated signaling pathway. CD49b has been associated with critical biological processes such as cell adhesion, specifically cell adhesion mediated by integrin, and is associated with a variety of biologically interesting macromolecules/ligands, for example, laminin, collagen and MMP-1. CD49b is a fairly uncommon antibody target, with a little more than 3000 publications in the last decade. Even still, CD49b is commonly used in flow cytometry applications as a phenotypic marker for differentiation of cell types, specifically in the study of immunology. 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).