

**XFD680 Anti-non-human primates/ human
CD49b Antibody *AK7, XFD680 Same
Structure to Alexa Fluor™ 680***Catalog number: 10491190, 10491191
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	0.1 mg/mL
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	AF680

Biological Properties

Appearance	liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF680 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	AF680
Excitation Wavelength	681 nm
Emission Wavelength	704 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 XFD680 (ex/em = 681/704 nm). XFD680 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 680 (Alexa Fluor® is the trademark of ThermoFisher). It is compatible with the 642 nm laser and 702/85 nm bandpass filter (for example, as in the Luminex Amnis FlowSight).