

**PE/Cy5 Anti-non-human primates/ human
CD49b Antibody *AK7***Catalog number: 104911N0, 104911N1, 104911N2
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	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, $\alpha 2$ integrin, VLA-2 α chain, Integrin $\alpha 2$ chain)
Clone	AK7
Conjugate	PE/Cy5

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with PE/Cy5 under optimal conditions
Application	Flow Cytometry (FACS)

Spectral Properties

Conjugate	PE/Cy5
Excitation Wavelength	565 nm
Emission Wavelength	666 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 PE/Cy5 (ex/em = 565/666 nm). It is compatible with the 561 nm laser and 670/30 nm bandpass filter (for example, as in the Bio-Rad ZE5 Cell Analyzer).