

mFluor™ Red 780 Anti-non-human primates/ human CD49b Antibody *AK7*Catalog number: 104910W0, 104910W1
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	mFluor™ Red 780

Biological Properties

Appearance	Dark blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with mFluor™ Red 780 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	mFluor™ Red 780
Excitation Wavelength	629 nm
Emission Wavelength	767 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 mFluor™ Red 780 (ex/em = 629/767 nm). It is compatible with the 637 nm laser and 780/60 nm bandpass filter (for example, as in the Thermo Fisher Attune NxT).