

1P-151-T100

## Monoclonal Antibody to CD49b / Integrin alpha 2 Phycoerythrin (PE) conjugated (100 tests)

<b>Clone:</b>	AK7
<b>Isotype:</b>	Mouse IgG1
<b>Specificity:</b>	The mouse monoclonal antibody AK7 recognizes CD49b, a 160-165 kDa alpha subunit of VLA-2 integrin complex expressed on platelets, megakaryocytes, activated T and B cells, monocytes, epithelial cells, endothelial cells and fibroblasts. HLDA Workshop code V S190
<b>Regulatory Status:</b>	RUO
<b>Immunogen:</b>	Human platelets
<b>Species Reactivity:</b>	Human, Non-Human Primates
<b>Preparation:</b>	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
<b>Storage Buffer:</b>	The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
<b>Storage / Stability:</b>	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.
<b>Usage:</b>	The reagent is designed for Flow Cytometry analysis of human blood cells using 10 µl reagent / 100 µl of whole blood or 10 <sup>6</sup> cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	CD49b / Integrin alpha 2 (ITGA2; alpha 2 subunit of VLA-2) heterodimerizes with CD29 to form the VLA-2 integrin alpha2/beta1 complex, which serves as a receptor for type I collagen, laminin, and E-cadherin. It also acts as a receptor for echovirus. Expressed on platelets, activated lymphocytes, monocytes, fibroblasts, epithelial and endothelial cells, CD49b mediates adhesion of these cells to the extracellular matrix. This interaction supports e.g. T cell proliferation and cytokine production, or wound healing. Defect in CD49b is associated with bleeding disorder platelet-type 9. Antibodies against CD49b are found in several immune disorders, including neonatal alloimmune thrombocytopenia.

**For laboratory research only, not for drug, diagnostic or other use.**

**Antibodies****References:**

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