

1F-151-T100

## Monoclonal Antibody to CD49b / Integrin alpha 2 Fluorescein (FITC) conjugated (100 tests)

Clone:	AK7
lsotype:	Mouse IgG1
Specificity:	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
Regulatory Status:	RUO
Immunogen:	Human platelets
Species Reactivity:	Human, Non-Human Primates
Preparation:	The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions. The reagent is free of unconjugated FITC and adjusted for direct use. No reconstitution is necessary.
Storage Buffer:	The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
Storage / Stability:	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.
Usage:	The reagent is designed for Flow Cytometry analysis of human blood cells using 4 $\mu$ l reagent / 100 $\mu$ l of whole blood or 10 <sup>6</sup> cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.
Expiration:	See vial label
Lot Number:	See vial label
Background:	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, epitelial 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.

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