

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 μ l reagent / 100 μ l of whole blood or 10 ⁶ 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.

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

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References:

*Gamble JR, Matthias LJ, Meyer G, Kaur P, Russ G, Faull R, Berndt MC, Vadas MA: Regulation of in vitro capillary tube formation by anti-integrin antibodies. J Cell Biol. 1993 May;121(4):931-43.

*Londrigan SL, Hewish MJ, Thomson MJ, Sanders GM, Mustafa H, Coulson BS: Growth of rotaviruses in continuous human and monkey cell lines that vary in their expression of integrins. J Gen Virol. 2000 Sep;81(Pt 9):2203-13.

*Werr J, Johansson J, Eriksson EE, Hedqvist P, Ruoslahti E, Lindbom L: Integrin alpha(2)beta(1) (VLA-2) is a principal receptor used by neutrophils for locomotion in extravascular tissue. Blood. 2000 Mar 1;95(5):1804-9.

*Ammon C, Meyer SP, Schwarzfischer L, Krause SW, Andreesen R, Kreutz M: Comparative analysis of integrin expression on monocyte-derived macrophages and monocyte-derived dendritic cells. Immunology. 2000 Jul;100(3):364-9.

*Ciarlet M, Crawford SE, Cheng E, Blutt SE, Rice DA, Bergelson JM, Estes MK: VLA-2 (alpha2beta1) integrin promotes rotavirus entry into cells but is not necessary for rotavirus attachment. J Virol. 2002 Feb;76(3):1109-23.

*Kögler G, Sensken S, Airey JA, Trapp T, Müschen M, Feldhahn N, Liedtke S, Sorg RV, Fischer J, Rosenbaum C, Greschat S, Knipper A, Bender J, Degistirici O, Gao J, Caplan AI, Colletti EJ, Almeida-Porada G, Müller HW, Zanjani E, Wernet P: A new human somatic stem cell from placental cord blood with intrinsic pluripotent differentiation potential. J Exp Med. 2004 Jul 19;200(2):123-35.

*Müller K, Schinn M, Reichrath J, Meineke V: 1alpha,25-Dihydroxyvitamin D3 modulates the response of human keratinocytes to ionizing radiation exposure. Anticancer Res. 2006 Jul-Aug;26(4A):2735-41.

*Engl T, Makarević J, Relja B, Natsheh I, Müller I, Beecken WD, Jonas D, Blaheta RA: Mycophenolate mofetil modulates adhesion receptors of the beta1 integrin family on tumor cells: impact on tumor recurrence and malignancy. BMC Cancer. 2005 Jan 11;5:4.

*Sutavani RV, Bradley RG, Ramage JM, Jackson AM, Durrant LG, Spendlove I: CD55 costimulation induces differentiation of a discrete T regulatory type 1 cell population with a stable phenotype. J Immunol. 2013 Dec 15;191(12):5895-903.

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