

## Product datasheet

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# ARG23695 anti-CD49b / Integrin alpha 2 antibody [AK7]

Package: 100 μg Store at: -20°C

#### **Summary**

Product Description Mouse Monoclonal antibody [AK7] recognizes CD49b / Integrin alpha 2.

Clone AK7 recognizes the integrin alpha 2 subunit, a  $^{160}$  kDa glycoprotein that non-covalently associates with the  $^{130}$  kDa integrin beta 1 subunit to form the VLA-2 complex. CD49b is expressed by platelets, long term cultivated T cells, approximately 50% of monocytes and most adherent cell lines. Mouse anti Human CD49b antibody, clone AK7 inhibits cell attachment to collagen.

Tested Reactivity Hu, Bb, R. Mk

Tested Application FACS, FuncSt, IHC-Fr

Host Mouse

Clonality Monoclonal

Clone AK7 Isotype IgG1

Target Name CD49b / Integrin alpha 2

Species Human

Conjugation Un-conjugated

Alternate Names Collagen receptor; VLA-2 subunit alpha; HPA-5; CD49B; CD49 antigen-like family member B; GPIa;

VLA-2; CD antigen CD49b; BR; VLAA2; Platelet membrane glycoprotein Ia; Integrin alpha-2

### **Application Instructions**

Application table	Application	Dilution
	FACS	1:50 - 1:100
	FuncSt	Assay-dependent
	IHC-Fr	1:500 - 1:1000
	IHC-Fr: The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Arigo recommends the use of acetone fixation for frozen sections. FACS: Use 10 $\mu$ l of the suggested working dilution to label 10^6 cells in 100 $\mu$ l. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### **Properties**

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS and 0.09% Sodium azide
Preservative	0.09% Sodium azide
Concentration	1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

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

#### Bioinformation

Gene Symbol ITGA2

Gene Full Name integrin, alpha 2 (CD49B, alpha 2 subunit of VLA-2 receptor)

Background This gene encodes the alpha subunit of a transmembrane receptor for collagens and related proteins.

The encoded protein forms a heterodimer with a beta subunit and mediates the adhesion of platelets and other cell types to the extracellular matrix. Loss of the encoded protein is associated with bleeding disorder platelet-type 9. Antibodies against this protein are found in several immune disorders, including neonatal alloimmune thrombocytopenia. This gene is located adjacent to a related alpha subunit gene. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2012]

Function Integrin alpha-2/beta-1 is a receptor for laminin, collagen, collagen C-propeptides, fibronectin and E-

cadherin. It recognizes the proline-hydroxylated sequence G-F-P-G-E-R in collagen. It is responsible for adhesion of platelets and other cells to collagens, modulation of collagen and collagenase gene expression, force generation and organization of newly synthesized extracellular matrix. [UniProt]

Calculated Mw 129 kDa