

## MONOCLONAL ANTIBODY CD49b

Cat. No.	Form	Quantity	Presentation
0717	Purified	0.2 mg	Freeze-dried
1425	FITC	100 tests	Liquid 2 ml

<b>Clone</b>	Gi9
<b>Isotype</b>	IgG1 kappa (mouse)
<b>Immunogen</b>	Isolated human platelets.
<b>Hybridoma</b>	Myeloma x63 Ag 8653 x Balb/c spleen cells.
<b>Specificity</b>	<p>The molecular weight of the recognized antigen is 138/115 kDa under non-reducing conditions and 145/126 kDa under reduced conditions.</p> <p>This antibody recognizes the VLA2 antigen (alpha 2 beta 1 complex), also called Ia/IIa glycoprotein complex or collagen receptor. This antibody reacts with the molecules carrying the Br(a) as well as the Br(b) alloantigen. It reacts with platelets, megakaryocytes and activated T cells. It does not react with B lymphocytes, T lymphocytes, monocytes, granulocytes and red blood cells.</p> <p>This antibody inhibits the adhesion of platelets to collagen.</p>
<b>Applications</b>	<p>Flow cytometry</p> <p>ELISA</p> <p>Studies of platelets interaction with collagen.</p>
<b>Buffer</b>	<p>Freeze-dried form: 1 mg/ml bovine serum albumin in phosphate buffered saline.</p> <p>Liquid form: 2 mg/ml bovine serum albumin in phosphate buffered saline containing 0.1% sodium azide.</p>
<b>Reconstitution and Storage</b>	<p>The freeze-dried form may be stored at 2-8°C until the expiration date. Reconstitute with 1 ml of distilled water. No preservative has been added. The reconstituted form may be stored at -20°C until the expiration date. Aliquotting is suggested to avoid multiple freeze-thaw cycles. The addition of sodium azide at 0.1% (w/v) is recommended for storage of the reconstituted form for up to one month at 2-8°C.</p> <p>The conjugated forms should not be frozen and should be stored in the dark at 2 - 8°C</p>

October 13, 1994



**Recommended  
Procedures**

Fluorescent microscopy or flow cytometry:

Liquid form: 20  $\mu$ l/5x10<sup>6</sup> platelets/test.

Freeze-dried form: 2  $\mu$ g/5x10<sup>6</sup> platelets /test.

**References**

This antibody has been studied at the Vth International Workshop on Human Leucocyte Differentiation Antigens in Boston (1993)

- 1) Bettaleb, A. et al. " Br<sup>b</sup>, a platelet alloantigen involved in neonatal alloimmune thrombocytopenia ". 1991, Vox Sang **60**, 230-234
- 2) Tusynski, G P. and Kowalska, M.A. " Thrombospondin-induced adhesion of human platelets " 1991, J. Clin. Invest. **87**, 1387-1394
- 3) Bonkhoff, H. et al "Differential expression of  $\alpha$ 6 and  $\alpha$ 2 very late antigen integrins in the normal, hyperplastic, and neoplastic prostate". 1993, Human Pathol. **24** (3) 243-248
- 4) Schaller, J. et al. "Evidence of  $\beta$ 1 integrins and fibronectin on spermatogenic cells in human testis" 1993, Human Reproduction **8** (11), 1873-1878
- 5) Santoso et al. "The human platelet alloantigens Br<sup>a</sup> and Br<sup>b</sup> are associated with a single amino acid polymorphism on glycoprotein Ia (integrin subunit  $\alpha$ 2)". 1993, J. Clin. Invest. **92**, 2427-2432.