



Sanquin

PeliCluster

CD49b

Specification sheet

Art.no	M1540
Test/vial	200
Clone	CLB-tromb/4, 10G11
	This clone has been derived from hybridization of SP2/O cells with spleen cells of a (BALB/c x A/J) mouse immunized with human T lymphocytes. The antibody was submitted to CD49b in the Fourth International Workshop on Human Leukocyte Differentiation Antigens.
Isotype	Mouse IgG1.
Source	Ascites fluid of tumour bearing BALB/c mice.
Purification	Ammoniumsulphate precipitation and ion exchange chromatography.
Packing	Each vial contains 1 ml with approximately 0.2 mg/ml monoclonal antibody and 10 mg BSA in 20 mM TRIS and 150 mM NaCl, pH 8.0.
Preservative	Sodium azide (NaN ₃), 0,1% (w/v).
Storage and stability	Monoclonal antibodies should be stored in the dark at 2-8°C. The reagent is stable until the expiry date stated on the vial label.
Major reactivity	The monoclonal antibody is directed against the CD49b antigen (GP1a or VLA-2 alpha-chain), which can form distinct complexes with either the CD29 antigen (GP IIa or VLA beta-chain), resulting in the VLA-2 (alpha-2 beta-1) complex, which is expressed on human platelets. The monoclonal antibody reacts with platelets, long-term cultivated T lymphocytes and activated T lymphocytes. In immunohistology the monoclonal antibody reacts with thymocytes, epithelial cells of a variety of tissues, peripheral nerves, fibroblasts, osteoclasts, glomerular mesangium and most non-haemopoietic adherent cell lines (1-3).
Molecular mass	130, 170 kDa.
Application	Functional studies on cells. Detection of human alloantibodies (anti-Br ^{a,b}) against VLA-2 (MAIPA assay) for studies.
Methods	Indirect immunofluorescence staining with analysis by flow cytometry or fluorescence microscopy. (see AZ_CDO.pdf)
References	1. Knicki, T.J. et al., J. Biol. Chem., <u>263</u> , 4516 (1988). 2. Giltay, J.C. et al., Blood, <u>73</u> , 1235 (1989). 3. Staatz, W.D. et al., J. Cell. Biol. <u>108</u> , 1917 (1989).