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Antigen	CD49b/CD29
Clone	P-16
Product Code	9456
Immunoglobulin Class	Mouse IgG1 kappa light chain

Antigen Description and Distribution

The CD49b (GpIa) protein is the alpha subunit of the integrin GpIa/IIa heterodimer (CD49b/CD29). Integrins are heterodimeric integral membrane glycoproteins composed of a distinct alpha chain and a common beta chain and are found on a wide variety of cell types including, T cells (the NKT cells), NK cells, fibroblasts and platelets. Integrins are involved in cell adhesion and also participate in cell-surface mediated signalling. On platelets, the GpIa/IIa complex functions primarily as a ligand for collagen.

Clone

P-16 was made in response to immunisation with Glanzmann's platelets (lacking GpIIb/IIIa). P-16 enabled the detection of HPA-5a and 5b antibodies in the monoclonal antibody immobilization of platelet antigens (MAIPA) assay[1]. P-16 binds to platelets in indirect immunofluorescence tests .

Suggested dilution in MAIPA assay: 1/10
This antibody can also be used to determine the levels of GPIa on the surface of platelets.

Please perform your own experiments to confirm optimal dilutions for use in your laboratory.

References

1. Campbell K, Rishi K, Howkins G, Gilby D, Mushens R, Ghevaert C, Metcalfe P, Ouwehand W, Lucas G (2007). A modified rapid monoclonal antibody-specific immobilisation of platelet antigen assay for the detection of human platelet antigens (HPA) antibodies: a multicentre evaluation. Vox Sanguinis, **93**, 289-297.