



Anti-GP9 monoclonal antibody, clone GND-36 [FITC] (DCABY-730)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	This gene encodes a small membrane glycoprotein found on the surface of human platelets. It forms a 1-to-1 noncovalent complex with glycoprotein Ib, a platelet surface membrane glycoprotein complex that functions as a receptor for von Willebrand factor. The complete receptor complex includes noncovalent association of the alpha and beta subunits with the protein encoded by this gene and platelet glycoprotein V. Defects in this gene are a cause of Bernard-Soulier syndrome, also known as giant platelet disease. These patients have unusually large platelets and have a clinical bleeding tendency.
Specificity	This antibody recognises the human CD42a cell surface antigen, a 22kD glycoprotein also known as the platelet glycoprotein gp Ib-IX complex. CD42a is expressed by platelets and megakaryocytes.
Immunogen	Peripheral blood mononuclear cells
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Human
Clone	GND-36
Conjugate	FITC
Applications	Flow Cytometry
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Format	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid
Size	100 µg

Buffer	Phosphate buffered saline
Preservative	None
Storage	Store at +4°C or at -20°C if preferred. This product should be stored undiluted. Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

GENE INFORMATION

Gene Name	GP9 glycoprotein IX (platelet) [Homo sapiens (human)]
Official Symbol	GP9
Synonyms	GP9; glycoprotein IX (platelet); GPIX; CD42a; platelet glycoprotein IX; GP-IX; glycoprotein 9
Entrez Gene ID	2815
Protein Refseq	NP_000165
UniProt ID	P14770
Chromosome Location	3q21.3
Pathway	ATF-2 transcription factor network; ATM mediated phosphorylation of repair proteins; ATM mediated response to DNA double-strand break; Androgen receptor signaling pathway; Aurora A signaling; BARD1 signaling events; BRCA1-associated genome surveillance complex (BASC); Cell Cycle; Chromosome Maintenance; Coregulation of Androgen receptor activity; DNA Repair; DNA damage response; Double-Strand Break Repair; E2F transcription factor network; FOXA1 transcription factor network; Fanconi Anemia pathw
References	<ol style="list-style-type: none"> 1. Zola, H. et al. (1984) Monoclonal Antibodies against Antigens of the Human Platelet Surface: Preparation and Properties. <i>Pathology</i> 16: 73-78. 2. Berndt, M.C. et al. (1985) Molecular characterisation of quinine/quinidine drug-dependent antibody platelet interaction using monoclonal antibodies. <i>Blood</i>. 66: 1292-1301. 3. Berndt, M.C. et al. (1985) Purification and preliminary characterization of the glycoprotein Ib complex in the human platelet membrane. <i>Eur. J. Biochem.</i> 151: 637-649. 4. Berndt, M.C. et al. (1983) Additional glycoprotein defects in Bernard-Soulier's syndrome: Confirmation of genetic basis by parental analysis. <i>Blood</i>. 62: 800-807. 5. San Miguel, J.F. et al. (1985) Characterisation of blast cells in chronic granulocytic leukaemia in transformation, acute myelofibrosis and undifferentiated leukaemia. II Studies with monoclonal antibodies and terminal transferase. <i>Brit. J. Haematol.</i> 59: 297-309. 6. San Miguel, J.F. et al. (1986) Surface marker analysis in acute myeloid leukaemia and correlation with FAB classification. <i>Brit. J. Haematol.</i> 64: 547-560.

7. Berndt, M.C. et al. (1989) A multifunctional receptor which controls haemostasis. *Today's Life Sciences* 1: 20-25.
 8. Berndt, M.C. et al. (1988) Ristocetin-dependent reconstitution of binding of von Willebrand factor to purified human platelet membrane glycoprotein Ib-IX complex. *Biochemistry* 27: 633-640.
 9. Yan, R. et al. (2011) Reconstitution of the platelet glycoprotein Ib-IX complex in phospholipid bilayer Nanodiscs. *Biochemistry*. 50: 10598-606.
 10. Sailer, T. et al. (2006) The course of severe autoimmune thrombocytopenia in patients not undergoing splenectomy. *Haematologica*. 91: 1041-5.
 11. Tomicic, M. et al. (2006) Frequency of HPA-15a and HPA-15b (Gov a/b) human platelet alloantigens in the Croatian population. *Arch Med Res*. 37: 172-4.
 12. Starcevic, M. et al. (2010) Neonatal alloimmune thrombocytopenia caused by anti-HLA-A24 alloantibodies. *Acta Paediatr*. 99: 630-2.
 13. Schallmoser, K. et al. (2006) Specificities of platelet autoantibodies and platelet activation in lupus anticoagulant patients: a relation to their history of thromboembolic disease. *Lupus*. 15: 507-14.
 14. Meyer, O. et al. (2003) Diclofenac-induced antibodies against RBCs and platelets: two case reports and a concise review. *Transfusion*. 43: 345-9.
 15. Lubenow, N. et al (2000) Very low platelet counts in post-transfusion purpura falsely diagnosed as heparin-induced thrombocytopenia. Report of four cases and review of literature. *Thromb Res*. 100: 115-25.
 16. Ghevaert, C. et al. (2008) A nonsynonymous SNP in the ITGB3 gene disrupts the conserved membrane-proximal cytoplasmic salt bridge in the alphaIIb beta3 integrin and cosegregates dominantly with abnormal proplatelet formation and macrothrombocytopenia. *Blood*. 111: 3407-14.
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