

BM2543**Monoclonal Antibody to CD41 gpIIb IIIa - Azide Free**

Alternate names:	CD41, CD61, GP2B, GP3A, GPIIb, GPIIb-IIIa, GPalpha IIb, ITGA2B, ITGAB, ITGB3, Integrin alpha-IIb, Integrin beta-3, Platelet membrane glycoprotein IIb
Quantity:	0.2 mg
Concentration:	0.2 mg/ml (prior to lyophilization)
Background:	Integrin alpha 2b (CD41) is a calcium-dependent, noncovalently associated heterodimer and contains a heavy chain (GPIIb alpha) and a light chain (GPIIb beta) linked by a single disulfide bond. The Integrin alpha 2B chain interacts with the Integrin beta 3 subunit/CD61 to form the platelet glycoprotein complex, gpIIb/IIIa. It is expressed on platelets and megakaryocytes. Ligands for the gpIIb/IIIa heterodimer include fibrinogen, von Willebrand factor, fibronectin, vitronectin, and thrombospondin. The gpIIb/IIIa complex is the major Integrin on platelets and is important for platelet adhesion and aggregation.
Host / Isotype:	Mouse / IgG1
Clone:	P2
Immunogen:	Human platelets
Format:	State: Lyophilized purified Ig fraction Buffer System: PBS buffer Preservatives: None Stabilizers: 1 mg/ml BSA Reconstitution: Restore with 1 ml distilled water.
Applications:	ELISA. Immunoprecipitation. Functional Assays. Fluorescence Microscopy or Flow Cytometry: 2 µg / 5x10⁶ platelets/test. Immunohistochemistry (Only suitable on Frozen Sections or Cell Smears): 1/50-1/100. Not recommended for use in Western blot. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	Reacts with gpIIb in the intact complex with gpIIIa, but not with IIb or IIIa, separately. Inhibits platelet aggregation induced by thrombin, collagen and ADP. The Molecular weight of the recognized antigen is 135kDa/95kDa.
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. The addition of 0.09% (w/v) Sodium Azide is recommended for storage of the reconstituted form for up to one month at 2-8°C. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

Product Citations:
Purchased from Acris:

FITC conjugated antibody is cited in:

1. Fröbel J, Cadeddu RP, Hartwig S, Bruns I, Wilk CM, Kündgen A, et al. Platelet proteome analysis reveals integrin-dependent aggregation defects in patients with myelodysplastic syndromes. *Mol Cell Proteomics*. 2013 May;12(5):1272-80. doi: 10.1074/mcp.M112.023168. Epub 2013 Feb 4. PubMed PMID: 23382103.

General Readings:

1. McGregor JL, Brochier J, Wild F, Follea G, Trzeciak MC, James E, et al. Monoclonal antibodies against platelet membrane glycoproteins. Characterization and effect on platelet function. *Eur J Biochem*. 1983 Mar 15;131(2):427-36. PubMed PMID: 6832159.
2. Phillips DR, Charo IF, Parise LV, Fitzgerald LA. The platelet membrane glycoprotein IIb-IIIa complex. *Blood*. 1988 Apr;71(4):831-43. PubMed PMID: 2833328.
3. This antibody was studied at the Human Leucocyte Workshop in Oxford (1986).