

Mouse Anti-HumanITGA2BMonoclonal Antibody

Mouse, Monoclonal (ITGA2B)

Cat. No. DMAB2530MH

Lot. No. (See product label)

PRODUCT INFORMATION

Antigen Description: ITGA2B encodes integrin alpha chain 2b. Integrins are heterodimeric integral membrane proteins composed of an alpha chain and a beta chain. Alpha chain 2b undergoes post-translational cleavage to yield disulfide-linked light and heavy chains that join with beta 3 to form a fibronectin receptor expressed in platelets that plays a crucial role in coagulation. Mutations that interfere with this role result in thrombasthenia. In addition to adhesion, integrins are known to participate in cell-surface mediated signalling.

Isotype: IgG₁

Specificity: Recognizes an epitope on the gpIIb/IIIa complex on the surface membrane of human platelets(1). The antibody precipitates two bands under non-reducing conditions (Mr 110 kDa and 130 kDa).

Clone: N149

Host animal: Mouse.

Source: Cell culture

Format: FITC, Liquid

Purification: Fluorescein which has a maximum absorbance at 492nm and an emission maximum at 518nm has been covalently attached to Anti-Human CD41 and purified to assure optimal fluorochrome/protein (F/P) molar ratios.

Application: May be useful in identification of platelets and megakaryocytes. We recommend using 1µg to stain 1.0 x 10⁵ cells in flow cytometric applications. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded. Centrifuge before opening to ensure complete recovery of vial contents.

PACKAGING

Concentration: 100µg/ml (OD280)

Buffer: 0.01M PBS, pH 7.4 containing 150mM Sodium chloride and 1.0% BSA

Preservative: 0.09% Sodium azide

Storage: Store protected from light at 2-8°C. DO NOT FREEZE.

Warning: This product contains sodium azide, which has been classified as Xn (Harmful) in European Directive 67/548/EEC in the concentration range of 0.1–1.0%. When disposing of this reagent through lead or copper plumbing, flush with copious volumes of water to prevent azide build-up in drains.

ANTIGEN GENE INFORMATION

Gene Name: [ITGA2B integrin, alpha 2b \(platelet glycoprotein IIb of IIb/IIIa complex, antigen CD41\)](#)[integrin, alpha 2b \(platelet glycoprotein IIb of IIb/IIIa complex, antigen CD41\)](#) [*Homo sapiens*]

Official Symbol: ITGA2B

Synonyms: GTA; CD41; GP2B; HPA3; CD41B; GPIIb; ITGA2B; integrin alpha-lib; GPalpha lib; platelet-specific antigen BAK; platelet membrane glycoprotein lib; platelet fibrinogen receptor, alpha subunit

GeneID: [3674](#)

mRNA Refseq: [NM_000419](#)

Protein Refseq: [NP_000410](#)

MIM: [607759](#)

UniProt ID: P08514

Chromosome Location: 17q21.32

Pathway: Arf6 signaling events, organism-specific biosystem; Arrhythmogenic right ventricular cardiomyopathy (ARVC), organism-specific biosystem; Axon guidance, organism-specific biosystem; Dilated cardiomyopathy, organism-specific biosystem; ECM-receptor interaction, organism-specific biosystem; Ephrin B reverse signaling, organism-specific biosystem; Focal Adhesion, organism-specific biosystem; Formation of Platelet plug, organism-specific biosystem; GRB2:SOS provides linkage to MAPK signaling for Integrins, organism-specific biosystem

Function: extracellular matrix binding; identical protein binding; receptor activity

REFERENCES

1. Jones, D. et al (1984) Brit. J. Haem. 57:621.
2. Calvete JJ (1995). "On the structure and function of platelet integrin alpha IIb beta 3, the fibrinogen receptor".*Proc. Soc. Exp. Biol. Med.*208(4): 346–60.