

# Mouse Anti-Rat ITGB3 Monoclonal Antibody

## Mouse, Monoclonal (ITGB3)

Cat. No. DMAB2533MH

Lot. No. (See product label)

### PRODUCT INFORMATION

**Antigen Description:** The ITGB3 protein product is the integrin beta chain beta 3. Integrins are integral cell-surface proteins composed of an alpha chain and a beta chain. A given chain may combine with multiple partners resulting in different integrins. Integrin beta 3 is found along with the alpha IIb chain in platelets. Integrins are known to participate in cell adhesion as well as cell-surface mediated signalling.

**Immunogen:** Newborn rat bone cell suspension

**Isotype:** IgG<sub>1</sub>

**Specificity:** Recognizes the (Mr 110 kDa) common Beta-subunit of the gp IIb/IIIa complex and the vitronectin receptor (VNR). The gp IIb (CD41) antigen and the gp IIIa (CD61) antigen form the cell adhesion complex (gp IIb/IIIa) which is the receptor on platelets for fibrinogen, von Willebrand factor, fibronectin and vitronectin. The CD61 antigen is present on virtually all resting and activated platelets. Also known to be present on endothelial cells, megakaryocytes and some leukemias of myeloid, erythroid and lymphoid origin.

**Clone:** G12

**Host animal:** Mouse.

**Source:** Cell culture

**Format:** FITC, Liquid

**Purification:** Covalently attached to anti-CD61 and purified to assure optimal fluorochrome/protein (F/P) molar ratios. Fluorescein has a maximum absorbance at 492nm and an emission maximum at 518nm has been

**Application:** Can be used to identify platelets and megakaryocytes. We recommend using 1µg to stain 1.0 x 10<sup>6</sup> 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 (OD280nm)

**Buffer:** 0.01M Potassium phosphate, 0.15M Sodium chloride, pH 7.2, containing 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:** [ITGB3 integrin, beta 3 \(platelet glycoprotein IIIa, antigen CD61\) \[Homo sapiens\]](#)

**Official Symbol:** ITGB3

**Synonyms:** CD61; GP3A; GPIIIa; ITGB3; integrin beta-3; platelet; glycoprotein IIIa; platelet membrane glycoprotein IIIa

**GeneID:** [3690](#)

**mRNA Refseq:** [NM\\_000212](#)

**Protein Refseq:** [NP\\_000203](#)

**MIM:** [173470](#)

**UniProt ID:** P05106

**Chromosome Location:** 17q21.32

**Pathway:** Arf6 signaling events, organism-specific biosystem; Cell surface interactions at the vascular wall, organism-specific biosystem; Dilated cardiomyopathy, organism-specific biosystem; ECM-receptor interaction, organism-specific biosystem; Focal adhesion, organism-specific biosystem; Hematopoietic cell lineage, organism-specific biosystem; IL4-mediated signaling events, organism-specific biosystem; Integrin-mediated cell adhesion, organism-specific biosystem; L1CAM interactions, organism-specific biosystem; Monoamine Transport, organism-specific biosystem; Nectin adhesion pathway, organism-specific biosystem; Osteoblast Signaling, organism-specific biosystem; PECAM1 interactions, organism-specific biosystem; Regulation of actin cytoskeleton, organism-specific biosystem; S1P1 pathway, organism-specific biosystem; p130Cas linkage to MAPK signaling for integrins, organism-specific biosystem

**Function:** cell adhesion molecule binding; identical protein binding; platelet-derived growth factor receptor binding; protein binding; receptor activity; vascular endothelial growth factor receptor 2 binding; vascular endothelial growth factor receptor 2 binding

### REFERENCES

1. Sosnoski DM, Emanuel BS, Hawkins AL, van Tuinen P, Ledbetter DH, Nussbaum RL, Kaos FT, Schwartz E, Phillips D, Bennett JS, et al. (Aug 1988). "Chromosomal localization of the genes for the vitronectin and fibronectin receptors alpha subunits and for platelet glycoproteins IIb and IIIa". *J Clin Invest* 81 (6): 1993-8.
2. Eliceiri, Brian P; Puente Xose S, Hood John D, Stupack Dwayne G, Schlaepfer David D, Huang Xiaozhu Z, Sheppard Dean, Cheresh David A (Apr. 2002). "Src-mediated coupling of focal adhesion kinase to integrin alpha (v) beta5 in vascular endothelial growth factor signaling". *J. Cell Biol.* (United States) 157 (1): 149-60.