

Product datasheet for AM26284PU-N

OriGene Technologies, Inc.

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CD61 (ITGB3) Mouse Monoclonal Antibody [Clone ID: BV4]

Product data:

Product Type: Primary Antibodies

Clone Name: BV4

Applications: ELISA, FN, IHC, IP, WB

Recommended Dilution: Immunohistochemistry on Frozen Sections: Tissue sections were fixed in acetone. As

negative control an irrelevant Mouse IgG was used (Ref.2). The typical starting working

dilution is 1/50.

Immunohistochemistry on Paraffin Sections. Tissue sections were deparaffinized in xylene

and pretreated with 10mmol/l sodium citrate buffer, pH 6.0 (Ref.3). The typical starting

working dilution is 1/50.

Functional Assays: Antibody clone BV4 inhibits the downstream activation, reducing the

mitogenic effects of two of its ligands, VEGFR-2 and HIV-1-Tat (Ref.1).

Immunoassays.

Immunoprecipiation: Antibody clone BV4 precipitates beta3 integrin complexes from

endothelial cell lysate.

Western blot: The typical starting working dilution is 1/50 (Ref.4).

Positive Control: Endometrium.

Reactivity: Bovine, Human

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Specificity: The monoclonal antibody BV4 recognizes Human beta3 integrin subunit present in Platelet

glycoprotein GPIIb-IIIa (integrin alphaIIb/beta3, CD41/CD61) and in the vitronectin receptor

(integrin alphaV/beta3, CD51/CD61).

Formulation: PBS

State: Purified

State: Liquid 0.2 µm filtered Ig fraction

Stabilizer: 0.1% BSA

Preservative: 0.02% Sodium Azide

Concentration: lot specific

Purification: Protein G Chromatography





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Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C.

DO NOT FREEZE!

Stability: Shelf life: one year from despatch.

Gene Name: integrin subunit beta 3

Database Link: Entrez Gene 3690 Human

P05106

Background: Intergins are a family of heterodimeric membrane glycoproteins expressed on diverse cell

types which function as the major receptors for extracellular matrix and as cell-cell adhesion molecules. As adhesion molecules they play an important role in numerous biological processes such as platelet aggregation, inflammation, immune function, wound healing, tumour metastasis and tissue migration during embryogenesis. In addition integrins are involved in signaling pathways, transmitting signals both into an out from cells. All integrins consist of two non-covalently associated subunits, alpha and beta. At least 12 different alpha subunits and 8 beta subunits have been identified. The beta subunits all contain 56 conserved cysteines (except beta4 which has 48) which are arranged in four repeating units. The beta3 subunit is a 93kDa protein that contains a large loop in the N-terminus stabilized by

intrachain disulphide bonding with the first cysteine-rich repeat.

Platelet glycoprotein GPIIb-IIIa is expressed on platelets and megakaryoblasts. It is constitutively expressed and becomes activated on triggered platelets. Platelet glycoprotein GPIIb-IIIa binds to fibrinogen, fibronectin, vWF, vitronectin and thrombospondin. Next to this it is also a receptor for several soluble adhesive proteins. Vitronectin receptor is expressed on endothelial cells, some B cells, monocytes/macrophages, platelets and tumour cells.

Vitronectin receptor binds next to vitronectin to fibrinogen, vWF, thrombospondin, fibronectin, osteopontin and collagen. Defects in human beta3 integrin are a cause of Glanzmann thrombasthenia, which is an autosomal recessive disorder characterized by mucocutaneous bleeding and the inability of this integrin to recognize macromolecular or

synthetic peptide ligands.

Synonyms: Integrin beta-3, GP3A, GPIlla