ARG54307
anti-CD61 / Integrin beta 3 antibody [VIPL2] (PE)

Package: 50 tests
Store at: 4°C

Summary

Product Description	PE-conjugated Mouse Monoclonal antibody [VIPL2] recognizes CD61 / Integrin beta 3
Tested Reactivity	Hu, NHuPrm
Tested Application	FACS
Specificity	The clone VIPL2 recognizes CD61, a 90-110 kDa transmembrane glycoprotein of integrin family, expressed on platelets, megacaryocytes, osteoclasts, endothelial cells and other cell types, including leucocytes and smooth muscle cells. HLDA V.; WS Code 5T-124
Host	Mouse
Clonality	Monoclonal
Clone	VIPL2
Isotype	IgG1
Target Name	CD61 / Integrin beta 3
Conjugation	PE
Alternate Names	GT; CD antigen CD61; CD61; BDPLT2; GPIIIa; BDPLT16; GP3A; Platelet membrane glycoprotein IIIa; Integrin beta-3

Application Instructions

Application table

Application	Dilution
FACS	10 µl / 10^6 cells

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

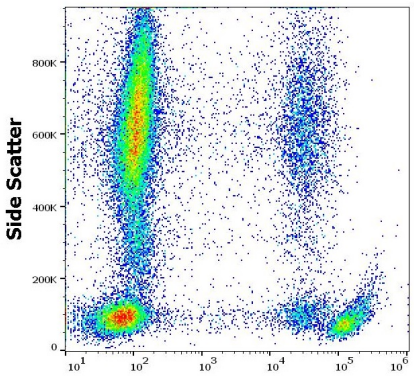
Properties

Form	Liquid
Purification Note	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Buffer	PBS, 15 mM Sodium azide and 0.2% (w/v) high-grade protease free BSA
Preservative	15 mM Sodium azide
Stabilizer	0.2% (w/v) high-grade protease free BSA
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

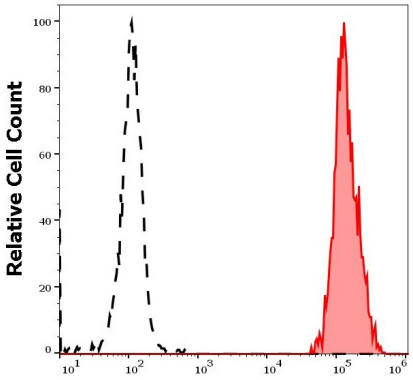
Database links	GeneID: 3690 Human Swiss-port # P05106 Human
Gene Symbol	ITGB3
Gene Full Name	integrin, beta 3 (platelet glycoprotein IIIa, antigen CD61)
Background	CD61 (beta3 integrin) is a transmembrane glycoprotein, which associates with CD41 or CD51 molecules to form heterodimeric adhesion receptores. CD41/CD61 complex is one of the earliest markers of the megakaryocytic lineage. It binds to fibronectin, fibrinogen and von Willebrand factor, and is involved in platelet aggregation. CD51/CD61 complex has similar binding properties and is involved in modulating migration and survival of angiogenic endothelial cells.
Function	Integrin alpha-V/beta-3 (ITGAV:ITGB3) is a receptor for cytotactin, fibronectin, laminin, matrix metalloproteinase-2, osteopontin, osteomodulin, prothrombin, thrombospondin, vitronectin and von Willebrand factor. Integrin alpha-IIb/beta-3 (ITGA2B:ITGB3) is a receptor for fibronectin, fibrinogen, plasminogen, prothrombin, thrombospondin and vitronectin. Integrins alpha-IIb/beta-3 and alpha-V/beta-3 recognize the sequence R-G-D in a wide array of ligands. Integrin alpha-IIb/beta-3 recognizes the sequence H-H-L-G-G-G-A-K-Q-A-G-D-V in fibrinogen gamma chain. Following activation integrin alpha-IIb/beta-3 brings about platelet/platelet interaction through binding of soluble fibrinogen. This step leads to rapid platelet aggregation which physically plugs ruptured endothelial surface. Fibrinogen binding enhances SELP expression in activated platelets (By similarity). In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions. [UniProt]
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Developmental Biology antibody; Immune System antibody; Signaling Transduction antibody
Calculated Mw	87 kDa
PTM	Phosphorylated on tyrosine residues in response to thrombin-induced platelet aggregation. Probably involved in outside-in signaling. A peptide (AA 740-762) is capable of binding GRB2 only when both Tyr-773 and Tyr-785 are phosphorylated. Phosphorylation of Thr-779 inhibits SHC binding.

Images



ARG54307 anti-CD61 / Integrin beta 3 antibody [VIPL2] (PE) FACS image

Flow Cytometry: Human peripheral whole blood stained with ARG54307 anti-CD61 / Integrin beta 3 antibody [VIPL2] (PE) (10 µl reagent / 100 µl of peripheral whole blood).



ARG54307 anti-CD61 / Integrin beta 3 antibody [VIPL2] (PE) FACS image

Flow Cytometry: Separation of human thrombocytes (red-filled) from neutrophil granulocytes (black-dashed). Human peripheral whole blood stained with ARG54307 anti-CD61 / Integrin beta 3 antibody [VIPL2] (PE) (10 µl reagent / 100 µl of peripheral whole blood).