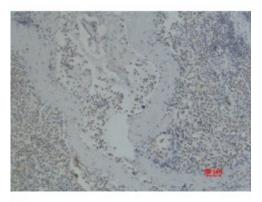


Anti-CD41 antibody





Description CD41 is a protein encoded by t

CD41 is a protein encoded by the ITGA2B gene which is approximately 113,3 kDa. CD41 is localised to the cell membrane. It is involved in RET signalling, apoptotic pathways, the integrin pathway and focal adhesion. This protein falls under the integrin alpha chain family of proteins. It is a cell-surface receptor that exist as a heterodimer of alpha and beta subunits. This receptor plays a crucial role in the blood coagulation system, by mediating platelet aggregation. CD41 is expressed in the bone marrow, lung, spleen, blood and heart. Mutations in the ITGA2B gene may result in glanzmann thrombasthenia. STJ97008 was developed from clone Q90 and was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen. The antibody detects endogenous human CD41 protein.

Model STJ97008

Host Mouse

Reactivity Human

Applications IHC

Immunogen Synthetic Peptide

Gene ID <u>3674</u>

Gene Symbol <u>ITGA2B</u>

Dilution range IHC 1:100

Specificity The antibody detects endogenous human CD41/ Intergrin alpha2b protein.

Tissue Specificity Isoform 1 and isoform 2 are expressed in platelets and megakaryocytes, but

not in reticulocytes. Not detected in Jurkat, nor in U937 cell lines . Isoform 3

is expressed in prostate adenocarcinoma, as well as in several

erythroleukemia, prostate adenocarcinoma and melanoma cell lines, including PC-3, DU-145, HEL, WM983A, WM983B and WM35. Not detected in

platelets, nor in normal prostate (at protein level).

Purification The antibody was affinity-purified from mouse ascites by affinity-

chromatography using specific immunogen.

Clone ID Q90

Note For Research Use Only (RUO).

Protein Name Integrin alpha-IIb GPalpha IIb GPIIb Platelet membrane glycoprotein IIb CD

antigen CD41 Integrin alpha-IIb heavy chain Integrin alpha-IIb light chain,

form 1 Integrin alpha-IIb light chain, form 2

Clonality Monoclonal

Conjugation Unconjugated

Isotype IgG1

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links HGNC:61380MIM:187800

Alternative Names Integrin alpha-IIb GPalpha IIb GPIIb Platelet membrane glycoprotein IIb CD

antigen CD41 Integrin alpha-IIb heavy chain Integrin alpha-IIb light chain,

form 1 Integrin alpha-IIb light chain, form 2

Function Integrin alpha-IIb/beta-3 is a receptor for fibronectin, fibrinogen,

plasminogen, prothrombin, thrombospondin and vitronectin. It recognizes the sequence R-G-D in a wide array of ligands. It 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 cell surface.

Cellular Localization Membrane. Single-pass type I membrane protein.

St John's Laboratory Ltd

F +44 (0)207 681 2580 **T** +44 (0)208 223 3081

W http://www.stjohnslabs.com/ E info@stjohnslabs.com