

ITGA2B Antibody

Purified Mouse Monoclonal Antibody Catalog # AO2320a

Specification

ITGA2B Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description** WB, IHC, FC, E <u>P08514</u> Human Mouse Monoclonal IgG1 113.4kDa KDa

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.

Immunogen Purified recombinant fragment of human ITGA2B (AA: 45-149) expressed in E. Coli.

Formulation Purified antibody in PBS with 0.05% sodium azide

ITGA2B Antibody - Additional Information

Gene ID 3674

Other Names

Integrin alpha-IIb, GPalpha IIb, GPIIb, Platelet membrane glycoprotein IIb, CD41, Integrin alpha-IIb heavy chain, Integrin alpha-IIb light chain, form 1, Integrin alpha-IIb light chain, form 2, ITGA2B, GP2B, ITGAB

Dilution WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 E~~1/10000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ITGA2B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



ITGA2B Antibody - Protein Information

Name ITGA2B

Synonyms GP2B, ITGAB

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 (By similarity). Following activation integrin alpha-IIb/beta-3 brings about platelet/platelet interaction through binding of soluble fibrinogen (PubMed:9111081). This step leads to rapid platelet aggregation which physically plugs ruptured endothelial cell surface (By similarity).

Cellular Location

Membrane; Single-pass type I membrane protein.

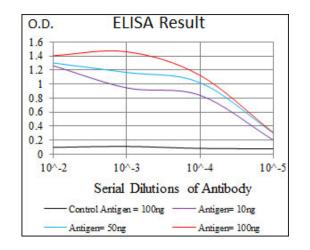
Tissue Location

Isoform 1 and isoform 2 are expressed in platelets and megakaryocytes, but not in reticulocytes. Not detected in Jurkat, nor in U937 cell lines (PubMed:2351656). 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) (PubMed:9809974)

ITGA2B Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>



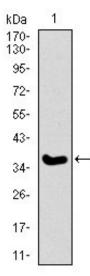


Figure 1: Western blot analysis using ITGA2B mAb against human ITGA2B recombinant protein. (Expected MW is 36.9 kDa)

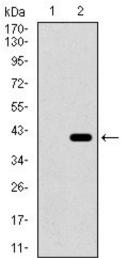


Figure 2: Western blot analysis using ITGA2B mAb against HEK293 (1) and ITGA2B (AA: 45-149)-hlgGFc transfected HEK293 (2) cell lysate.

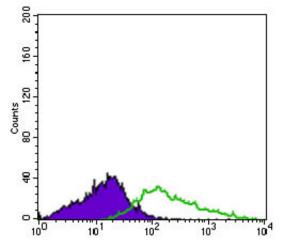


Figure 4: Flow cytometric analysis of HL60 cells using ITGA2B mouse mAb (green) and negative control (purple).



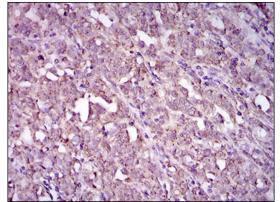


Figure 5: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using ITGA2B mouse mAb with DAB staining.

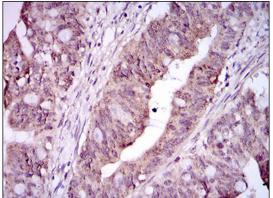


Figure 6: Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using ITGA2B mouse mAb with DAB staining.

ITGA2B Antibody - References

1. Pediatr Blood Cancer. 2012 Aug;59(2):335-8. 2. Blood. 2011 Dec 1;118(23):5996-6005.