

ITGA2B Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO2320a**Specification****ITGA2B Antibody - Product Information**

Application	WB, IHC, FC, E
Primary Accession	P08514
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	113.4kDa KDa

Description

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.

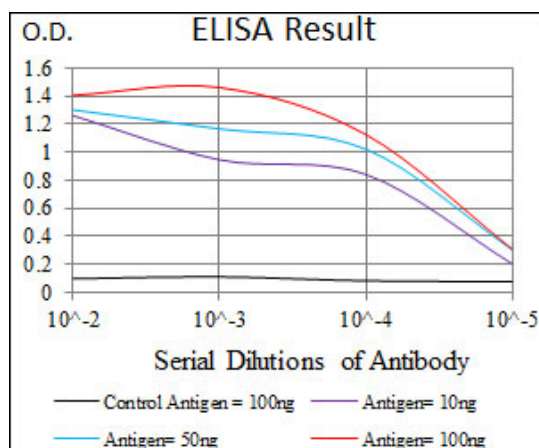
Tissue Location

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.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



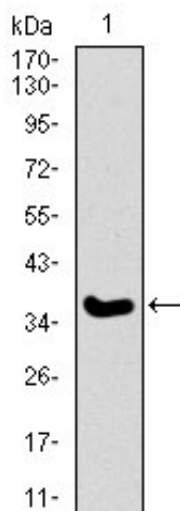


Figure 1: Western blot analysis using ITGA2B mAb against human ITGA2B recombinant protein. (Expected MW is 36.9 kDa)

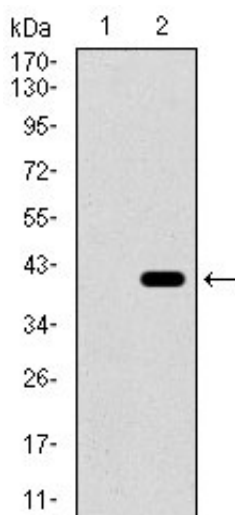


Figure 2: Western blot analysis using ITGA2B mAb against HEK293 (1) and ITGA2B (AA: 45-149)-hlgGfc transfected HEK293 (2) cell lysate.

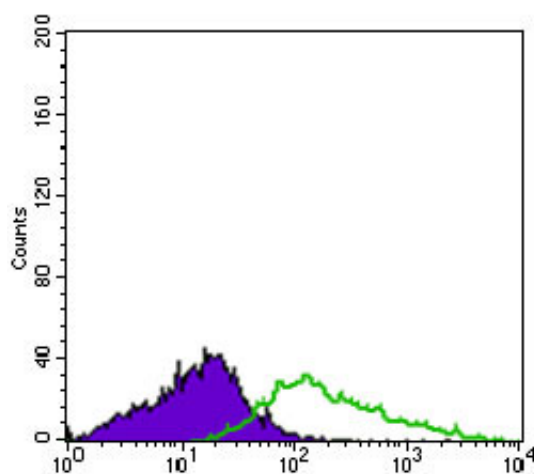


Figure 4: Flow cytometric analysis of HL60 cells using ITGA2B mouse mAb (green) and negative control (purple).

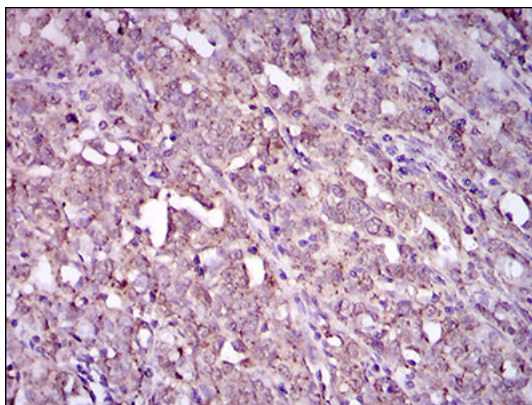


Figure 5: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using ITGA2B mouse mAb with DAB staining.

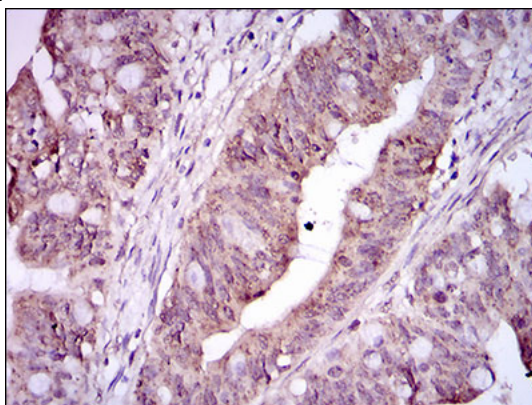


Figure 6: Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using ITGA2B mouse mAb with DAB staining.

ITGA2B Antibody - References

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