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ITGA2B Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO2319a

Product Information

Application	WB, IHC, FC, E
Primary Accession	P08514
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2E10C9
Isotype	IgG1
Calculated MW	113377
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	Ascitic fluid containing 0.03% sodium azide.

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.

Protein Information

Name	ITGA2B (HGNC:6138)

Synonyms	GP2B, ITGAB
Function	Integrin alpha-IIb/beta-3 (ITGA2B:ITGB3) 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). Integrin ITGA2B:ITGB3 is also the receptor of erythrocyte-specific ICAM4 ligand involved in heterotypic cell-cell adhesion between erythrocytes and activated platelets (PubMed:12477717).
Cellular Location	Cell 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)

References

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

Images

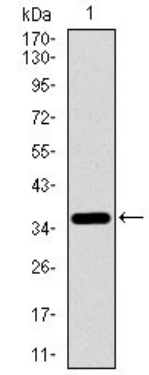


Figure 1: Western blot analysis using ITGA2B mAb against human ITGA2B recombinant protein. (Expected MW is 36.9 kDa)

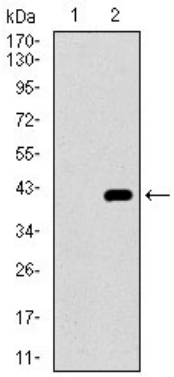
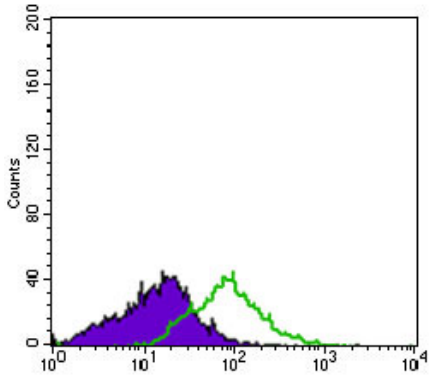


Figure 2: Western blot analysis using ITGA2B mAb against HEK293 (1) and ITGA2B (AA: 45-149)-hIgGFc transfected HEK293 (2) cell lysate.

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



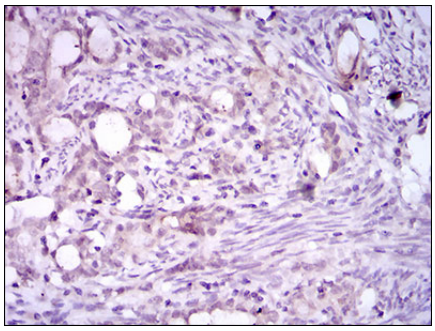


Figure 5: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using ITGA2B mouse mAb with DAB staining.

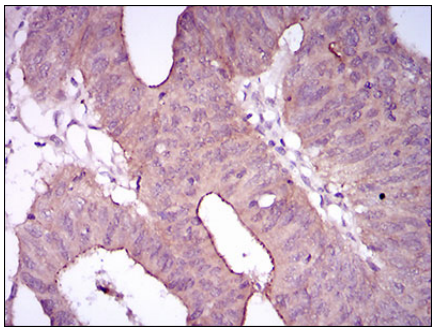


Figure 6: Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using ITGA2B mouse mAb with DAB staining.

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