

# ITGA2B Antibody

Purified Mouse Monoclonal Antibody  
Catalog # A02319a

## Product Information

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<b>Application</b>	WB, IHC, FC, E
<b>Primary Accession</b>	<a href="#">P08514</a>
<b>Reactivity</b>	Human
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone Names</b>	2E10C9
<b>Isotype</b>	IgG1
<b>Calculated MW</b>	113377
<b>Description</b>	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.
<b>Immunogen</b>	Purified recombinant fragment of human ITGA2B (AA: 45-149) expressed in E. Coli.
<b>Formulation</b>	Ascitic fluid containing 0.03% sodium azide.

## Additional Information

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<b>Gene ID</b>	3674
<b>Other Names</b>	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
<b>Dilution</b>	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 E~~1/10000
<b>Storage</b>	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.
<b>Precautions</b>	ITGA2B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	ITGA2B ( <a href="#">HGNC:6138</a> )
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## Synonyms

GP2B, ITGAB

## Function

Integrin alpha-IIb/beta-3 (ITGA2B:ITGB3) is a receptor for fibrinogen, 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-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

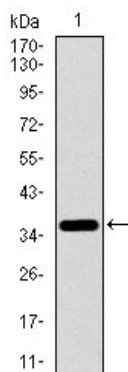


Figure 1: Western blot analysis using ITGA2B mAb against human ITGA2B recombinant protein. (Expected MW is 36.9 kDa)

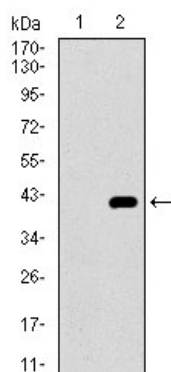


Figure 2: Western blot analysis using ITGA2B mAb against HEK293 (1) and ITGA2B (AA: 45-149)-hIgGFc transfected HEK293 (2) cell lysate.

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

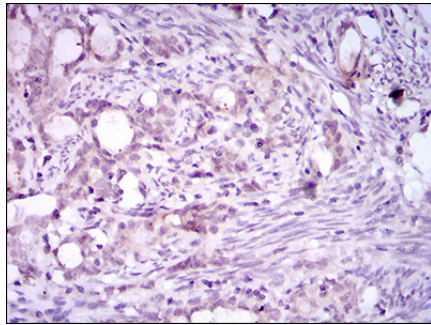
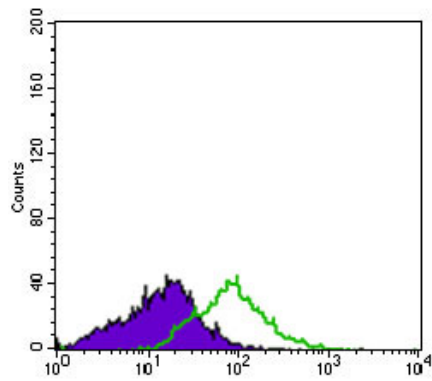


Figure 5: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using ITGA2B mouse mAb with DAB staining.

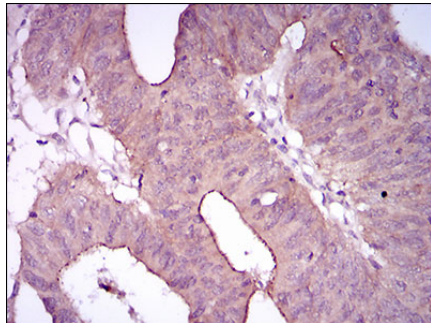


Figure 6: Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using ITGA2B mouse mAb with DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.