

# Anti-ITGA2B Picoband Antibody

Catalog # ABO12333

## Specification

# Anti-ITGA2B Picoband Antibody - Product Information

Application Primary Accession Host Reactivity Clonality Format **Description** Rabbit IgG polyclonal antib WB, IHC-P <u>P08514</u> Rabbit Human, Mouse, Rat Polyclonal Lyophilized

Rabbit IgG polyclonal antibody for Integrin alpha-lib(ITGA2B) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

# Anti-ITGA2B Picoband 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

Calculated MW 113377 MW KDa

**Application Details** Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat<br> <br> Western blot, 0.1-0.5 µg/ml, Mouse, Rat, Human<br>

Subcellular Localization Membrane; Single-pass type I membrane protein.

**Tissue Specificity** 

Isoform 1 and isoform 2 were identified in platelets and megakaryocytes, but not in reticulocytes or in Jurkat and U-937 white blood cell line. Isoform 3 is expressed by leukemia, prostate adenocarcinoma and melanoma cells but not by platelets or normal prostate or breast epithelial cells.

Protein Name Integrin alpha-lib

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.



#### Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human ITGA2B (677-711aa EAELAVHLPQGAHYMRALSNVEGFERLICNQKKEN), different from the related mouse sequence by four amino acids.

**Purification** Immunogen affinity purified.

**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

## Anti-ITGA2B Picoband 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:<a href="http://www.uniprot.org/citations/9111081" target="\_blank">9111081</a>). 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)

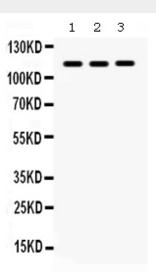
### Anti-ITGA2B Picoband Antibody - Protocols

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

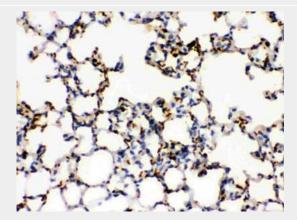
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>



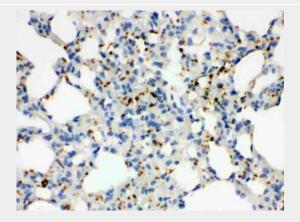
# **Anti-ITGA2B Picoband Antibody - Images**



Anti- ITGA2B Picoband antibody, ABO12333, Western blottingAll lanes: Anti ITGA2B (ABO12333) at 0.5ug/mlLane 1: Rat Lung Tissue Lysate at 50ugLane 2: Rat Liver Tissue Lysate at 50ugLane 3: Mouse Spleen Tissue Lysate at 50ugPredicted bind size: 113KDObserved bind size: 113KD

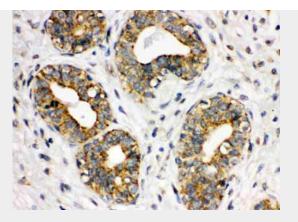


Anti- ITGA2B Picoband antibody, ABO12333, IHC(P)IHC(P): Mouse Lung Tissue



Anti- ITGA2B Picoband antibody, ABO12333, IHC(P)IHC(P): Rat Lung Tissue





Anti- ITGA2B Picoband antibody, ABO12333, IHC(P)IHC(P): Human Mammary Cancer Tissue Anti-ITGA2B Picoband Antibody - Background

Integrin alpha-IIb is a protein that in humans is encoded by the ITGA2B gene. It is mapped to 17q21.32. 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 fibrinogen 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.