

Anti-Integrin beta 3/ITGB3 Antibody Picoband®

Catalog Number: A00587-1

About ITGB3

ITGB3 (INTEGRIN, BETA-3), also called GP3A, GPIIIa, CD61, is a protein that in humans is encoded by the ITGB3 gene. It is a cluster of differentiation found on thrombocytes. This gene is mapped to 17q21.32. And the GP3A gene has 14 exons. The 3-prime exon is larger than 1,700 nucleotides and contains the 3-prime untranslated region. The ITGB3 complex belongs to the integrin class of cell adhesion molecule receptors that share a common heterodimeric structure with alpha and beta subunits. Additionally, the ITGB3 complex mediates platelet aggregation by acting as a receptor for fibrinogen. Although the ITGB3 is expressed on the cell surface at normal levels and is capable of function following extracellular stimulation, it could not be activated via the 'inside-out' signaling pathways.

Overview

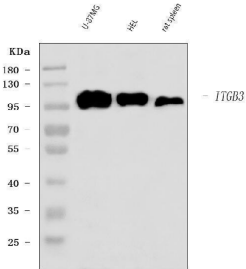
Product Name	Anti-Integrin beta 3/ITGB3 Antibody Picoband®
Reactive Species	Human, Rat
Description	Boster Bio Anti-Integrin beta 3/ITGB3 Antibody Picoband® catalog # A00587-1. Tested in ELISA, Flow Cytometry, IHC, WB applications. This antibody reacts with Human, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, Flow Cytometry, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	P05106

Technical Details

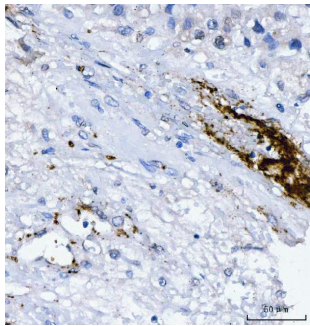
Immunogen	E.coli-derived human Integrin beta 3/ITGB3 recombinant protein (Position: N29-Q523).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human, Rat Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human, Rat Flow Cytometry (Fixed), 1-3 ug/1x10 ⁶ cells, Human ELISA, 0.1-0.5 ug/ml, -

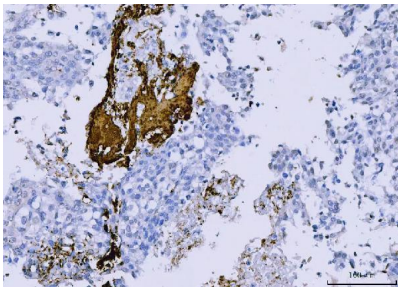
Anti-Integrin beta 3/ITGB3 Antibody Picoband® (A00587-1) Images



Western blot analysis of Integrin beta 3/ITGB3 using anti-Integrin beta 3/ITGB3 antibody (A00587-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human U-87MG whole cell lysates, Lane 2: human HEL whole cell lysates, Lane 3: rat spleen tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Integrin beta 3/ITGB3 antigen affinity purified polyclonal antibody (Catalog # A00587-1) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Integrin beta 3/ITGB3 at approximately 100 kDa. The expected band size for Integrin beta 3/ITGB3 is at 87 kDa.

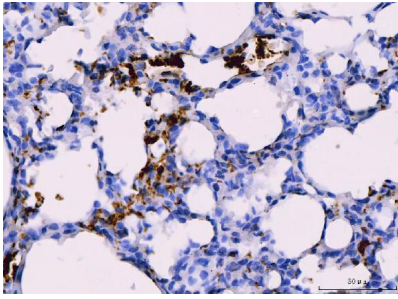


IHC analysis of Integrin beta 3/ITGB3 using anti-Integrin beta 3/ITGB3 antibody (A00587-1). Integrin beta 3/ITGB3 was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Integrin beta 3/ITGB3 Antibody (A00587-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

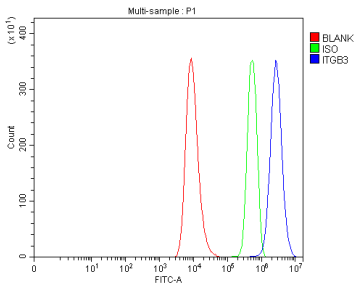


IHC analysis of Integrin beta 3/ITGB3 using anti-Integrin beta 3/ITGB3 antibody (A00587-1). Integrin beta 3/ITGB3 was detected in a paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Integrin beta 3/ITGB3 Antibody (A00587-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

IHC analysis of Integrin beta 3/ITGB3 using anti-Integrin beta 3/ITGB3 antibody (A00587-1). Integrin beta 3/ITGB3 was



detected in a paraffin-embedded section of rat lung tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Integrin beta 3/ITGB3 Antibody (A00587-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



Flow Cytometry analysis of HEL cells using anti-Integrin beta 3/ITGB3 antibody (A00587-1). Overlay histogram showing HEL cells stained with A00587-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Integrin beta 3/ITGB3 Antibody (A00587-1, 1 ug/1x10⁶ cells) for 30 min at 20°C. DyLight® 488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

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Anti-Integrin beta 3/ITGB3 Antibody

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