

Rabbit Anti-ITGB3 antibody

SL0342R

Product Name ITGB3

Chinese Name 整合素 β 3/CD61 抗体

Alias Integrin beta-3; Integrin beta chain, β 3 precursor; Integrin Beta 3; CD 61; CD61; CD61 antigen; HPA 1; HPA 4; Integrin beta 3 (platelet glycoprotein IIIa antigen CD61); Integrin beta chain beta 3; ITGB 3; NAIT; Platelet fibrinogen receptor beta subunit; Platelet glycoprotein IIIa; platelet glycoprotein IIIa precursor; Platelet membrane glycoprotein IIIa; PTP; ITB3_HUMAN. Integrin β 3; Integrin- β 3; Integrin β 3;

Research Area Cell biology immunology Signal transduction Stem cells Cell adhesion molecule

Immunogen Species Rabbit

Clonality Polyclonal

React Species Human, Mouse, (predicted: Pig, Cow, Rabbit,)
WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need a

Applications not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 84kDa

Detection molecular weight 90 kDa

Cellular localization The cell membrane

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human Integrin beta 3: 27-120/788 <Extracellu

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed The ITGB3 protein product is the integrin beta chain beta 3. Integrins are integral cell-surface proteins composed of an alpha chain and a beta chain. A given chain may combine with multiple partners resulting in different integrins. Integrin beta 3 is found along with the alpha IIb chain in platelets. Integrins are known to be involved in cell adhesion as well as cell-surface mediated signalling. [provided by RefSeq, Jul 2008]
Product Detail	<p>Function: Integrin alpha-V/beta-3 is a receptor for cytotactin, fibronectin, laminin, matrix metalloproteinase, osteomodulin, prothrombin, thrombospondin, vitronectin and von Willebrand factor. Integrin alpha-V/beta-3 is a receptor for fibronectin, fibrinogen, plasminogen, prothrombin, thrombospondin and vitronectin. Integrin alpha-IIb/beta-3 and alpha-V/beta-3 recognize the sequence R-G-D in a wide array of ligands. Integrin alpha-IIb/beta-3 recognizes the sequence H-H-L-G-G-G-A-K-Q-A-G-D-V in fibrinogen gamma chain. Following activation integrin alpha-IIb/beta-3 brings about platelet/platelet interaction through binding to fibrinogen. This step leads to rapid platelet aggregation which physically plugs ruptured endothelium. In the case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis and Kaposi's sarcoma lesions.</p> <p>Subunit: Heterodimer of an alpha and a beta subunit. Beta-3 associates with either alpha-IIb or alpha-V. Integrin alpha-IIb/beta-3 interacts with FLNB. Interacts with COMP. Interacts with HIV-1 Tat. Interacts with PDIA6 following platelet activation. Interacts with SYK; upon activation by ITGB3 promotes platelet adhesion. Interacts with SYK.</p> <p>Subcellular Location: Membrane; Single-pass type I membrane protein.</p> <p>Tissue Specificity: Isoform beta-3A and isoform beta-3C are widely expressed. Isoform beta-3A is specifically expressed in osteoblast cells; isoform beta-3C is specifically expressed in prostate and testis.</p> <p>Post-translational modifications: Phosphorylated on tyrosine residues in response to thrombin-induced platelet aggregation. Probable role in outside-in signaling. A peptide (AA 740-762) is capable of binding GRB2 only when both Tyr-740 and Tyr-762 are phosphorylated. Phosphorylation of Thr-779 inhibits SHC binding.</p> <p>DISEASE: Defects in ITGB3 are a cause of Glanzmann thrombasthenia (GT) [MIM:273800]; also known as Bernard-Soulier syndrome of Glanzmann and Naegeli. GT is the most common inherited disease of platelets. It is an autosomal recessive disorder characterized by mucocutaneous bleeding of mild-to-moderate severity and the inability to recognize macromolecular or synthetic peptide ligands. GT has been classified clinically into type I, platelets show absence of the glycoprotein IIb/beta-3 complexes at their surface and lack</p>

clot retraction capability. In type II, the platelets express the glycoprotein IIb/beta-3 complex at 10-20% (5-20% controls), have detectable amounts of fibrinogen, and have low or moderate clot retraction. Platelets of GT 'variants' have normal or near normal (60-100%) expression of dysfunctional receptors.

Similarity:

Belongs to the integrin beta chain family. Contains 1 VWFA domain.

SWISS:

P05106

Gene ID:

3690

Database links:

[Entrez Gene: 3690](#) Human

[Entrez Gene: 16416](#) Mouse

[Entrez Gene: 29302](#) Rat

[Omim: 173470](#) Human

[SwissProt: P05106](#) Human

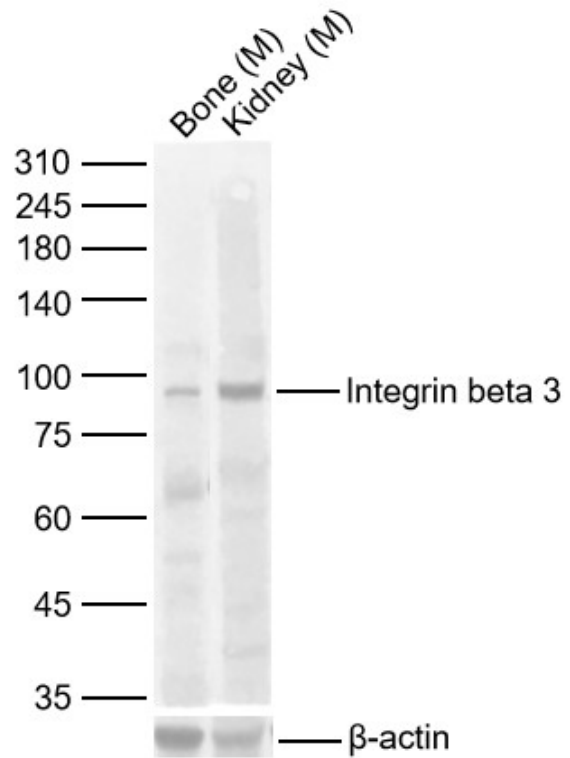
[SwissProt: O54890](#) Mouse

[Unigene: 218040](#) Human

[Unigene: 87150](#) Mouse

CD61 抗原又称为 GP III a, 是一种表达于血小板、巨核细胞、单核细胞、巨噬细胞和 endothelial cells 的 glycoprotein。CD61 和 CD41 构成血小板 glycoproteinII b/III b。

**Product
Picture**



Sample:

Lane 1: Mouse Bone Lysates

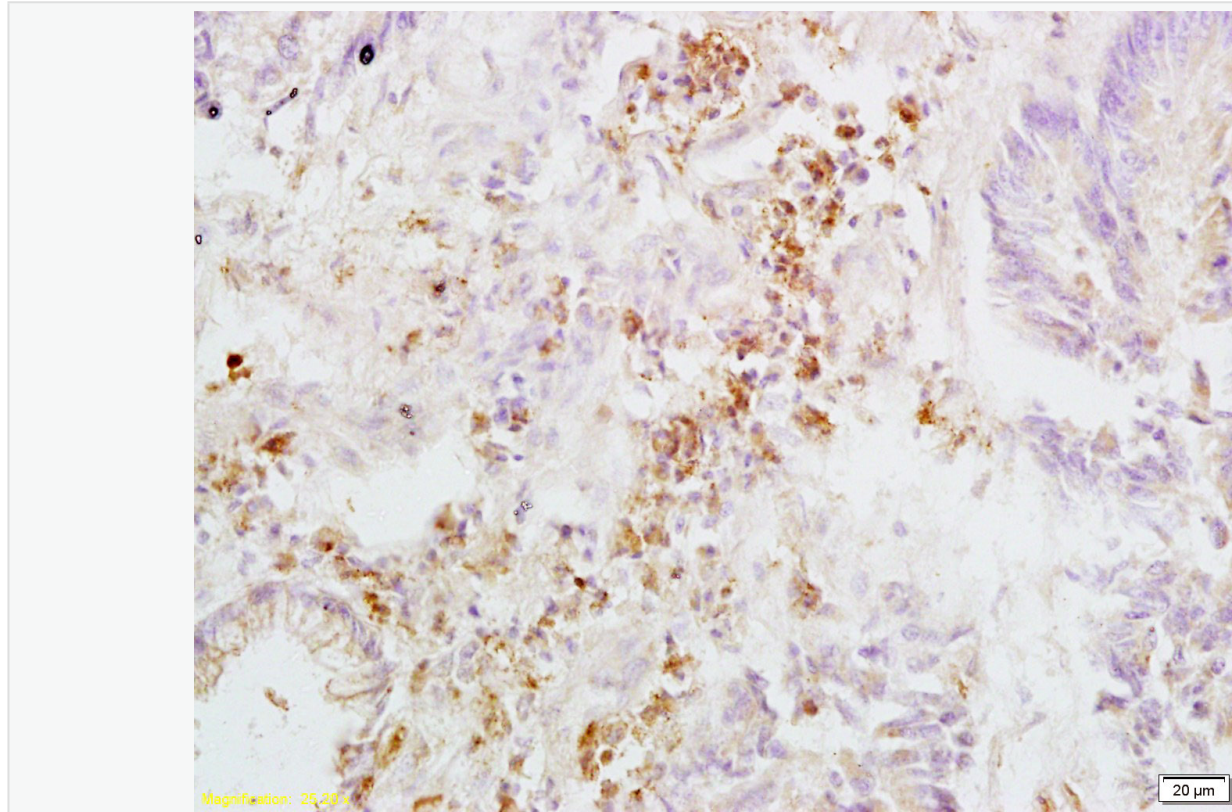
Lane 2: Mouse Kidney Lysates

Primary: Anti-Integrin beta 3 (SL0342R) at 1/1000 dilution

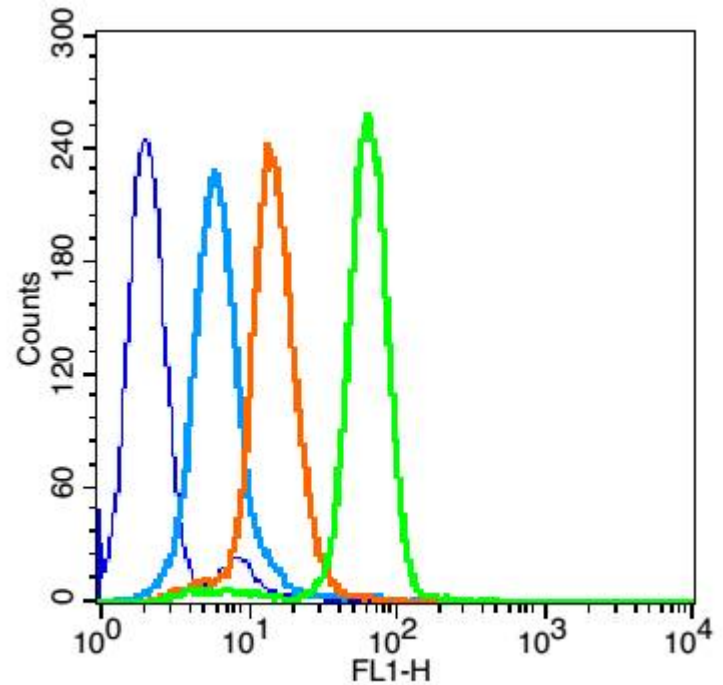
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 84kDa

Observed band size: 84kDa

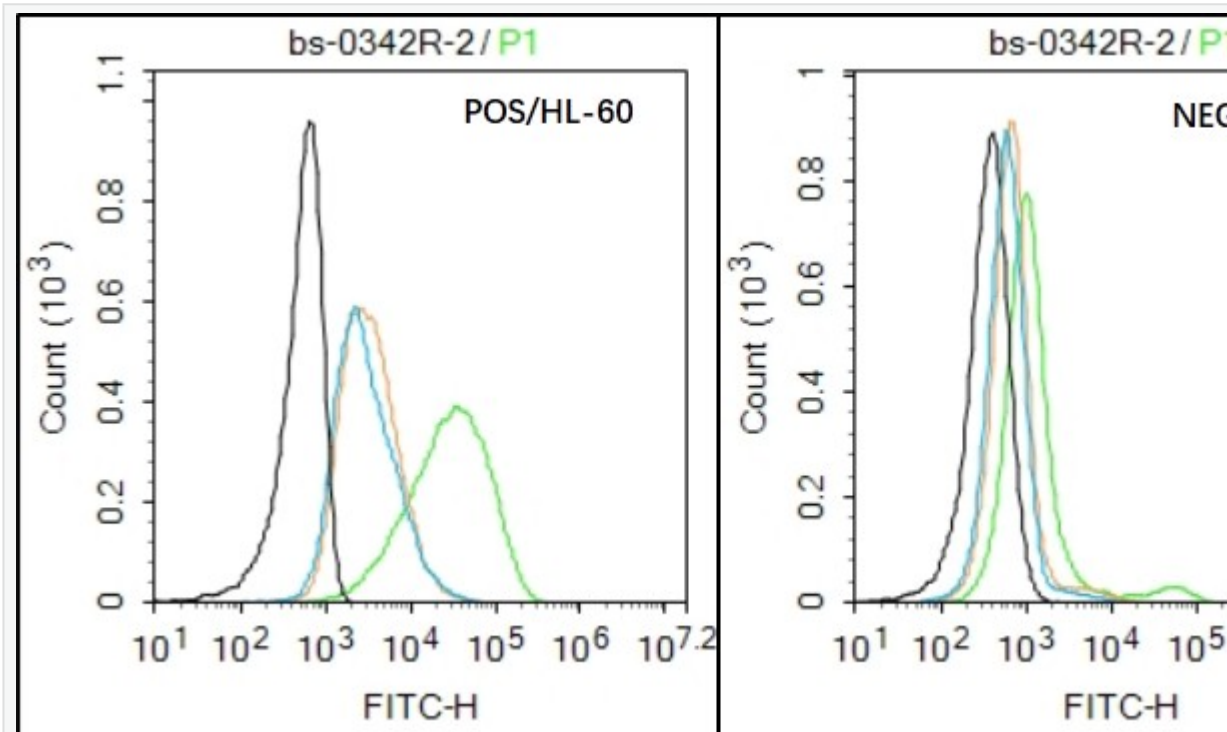


Tissue/cell: human rectal carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous
3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 2
Incubation: Anti-Integrin beta 3/CD61 Polyclonal Antibody, Unconjugated(SL0342R) 1:200,
廢, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Overlay histogram showing HL 60 cells stained with SL0342R (Green line).

The cells were fixed with 90% methanol (5 min) and then permeabilized with 1M PBS-Tween for 10 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (SL0342R, 1 μ g/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was fluorescein isothiocyanate goat anti-rabbit IgG (H+L) (SL 0295G-FITC, Biorad) at 1/200 dilution for 30 min at 22°C. Isotype control antibody was rabbit IgG (polyclonal, SL0342R) (1 μ g/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of 20,000 events were collected using a 20mW Argon ion laser (488nm) and a 488nm bandpass filter.



Black line : Positive blank control (HL60); Negative blank control (A431)

Green line : Primary Antibody (Rabbit Anti-CD61 antibody (SL0342R))

Orange line: Isotype Control Antibody (Rabbit IgG) .

Blue line : Secondary Antibody (Goat anti-rabbit IgG-AF488)

HL60 (Positive) and A431 Negative control) cells (black) were incubated in 5% BSA block buffer for 30 min at room temperature. Cells were then stained with CD61 Antibody(SL0342R)at 1:50 dilution in block buffer and incubated for 30 min at room temperature, washed twice with 2% BSA in PBS, followed by secondary antibody(blue) incubation for 40 min at room temperature. Acquisitions of 20,000 cells were performed. Cells stained with primary antibody (green), and isotype control (orange).