

Rabbit Anti-phospho-ITGB3 (Tyr785) antibody

SL5452R

Product Name:	phospho-ITGB3 (Tyr785)
Chinese Name:	磷酸化整合素β3/CD61抗体
Alias:	Integrin beta 3 (phospho Y785); p-Integrin beta 3 (phospho Y785); Integrin beta chain, β3 precursor; Integrin Beta 3; CD 61; CD61; CD61 antigen; GP3A; GPIIIa; HPA 1; HPA 4; Integrin beta 3 (platelet glycoprotein IIIa antigen CD61); Integrin beta chain beta 3; ITG B3; ITGB3; NAIT; Platelet fibrinogen receptor beta subunit; Platelet glycoprotein IIIa; platelet glycoprotein IIIa precursor; Platelet membrane glycoprotein IIIa; PTP.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	87kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human ITGB3 around the phosphorylation site of Tyr785:IT(p-Y)RG
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	The ITGB3 (Integrin beta chain beta 3) 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 participate in cell adhesion as well as cell-surface mediated signalling.

Function:

Integrin alpha-V/beta-3 is a receptor for cytotactin, fibronectin, laminin, matrix metalloproteinase-2, osteopontin, osteomodulin, prothrombin, thrombospondin, vitronectin and von Willebrand factor. Integrin alpha-IIb/beta-3 is a receptor for fibronectin, fibrinogen, plasminogen, prothrombin, thrombospondin and vitronectin. Integrins 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 of soluble fibrinogen. This step leads to rapid platelet aggregation which physically plugs ruptured endothelial surface. In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions.

Subunit:

Heterodimer of an alpha and a beta subunit. Beta-3 associates with either alpha-IIb or alpha-V. Isoform Beta-3C interacts with FLNB. Interacts with COMP. Interacts with HIV-1 Tat. Interacts with PDIA6 following platelet stimulation. Interacts with SYK; upon activation by ITGB3 promotes platelet adhesion. Interacts with MYO10.

Subcellular Location:

Membrane; Single-pass type I membrane protein.

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.

Post-translational modifications:

Phosphorylated on tyrosine residues in response to thrombin-induced platelet aggregation. Probably involved in outside-in signaling. A peptide (AA 740-762) is capable of binding GRB2 only when both Tyr-773 and Tyr-785 are phosphorylated. Phosphorylation of Thr-779 inhibits SHC binding.

DISEASE:

Defects in ITGB3 are a cause of Glanzmann thrombasthenia (GT) [MIM:273800]; also known as thrombasthenia 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 of this integrin to recognize macromolecular or synthetic peptide ligands. GT has been classified clinically into types I and II. In type I, platelets show absence of the glycoprotein IIb/beta-3 complexes at their surface and lack fibrinogen and clot retraction capability. In type II,

the platelets express the glycoprotein IIb/beta-3 complex at reduced levels (5-20% controls), have detectable amounts of fibrinogen, and have low or moderate clot retraction capability. The 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

Omim: 173470 Human

SwissProt: P05106 Human

SwissProt: O54890 Mouse

Unigene: 218040 Human

Unigene: 87150 Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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上的glycoprotein。CD61和CD41构成血小板glycoproteinII b/III b。