Integrin β3 (Phospho Tyr773) Rabbit pAb

CatalogNo: YP0144 Orthogonal Validated

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- WB,IHC,IF,ELISA

MW
- 130kD (Observed)

Isotype
- IgG

Storage

Storage*	-15°C to -25°C/1 year (Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Recommended Dilution Ratios

WB 1:500-1:2000
IHC 1:100-1:300
ELISA 1:10000
IF 1:50-200

Basic Information

Clonality	Polyclonal

Immunogen Information

Immunogen	The antiserum was produced against synthesized peptide derived from human Integrin beta3 around the phosphorylation site of Tyr773. AA range:739-788

Specificity	Phospho-Integrin β3 (Y773) Polyclonal Antibody detects endogenous levels of Integrin β3 protein only when phosphorylated at Y773.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):PLyKE

Target Information

Gene name	ITGB3
Protein Name	Integrin beta-3

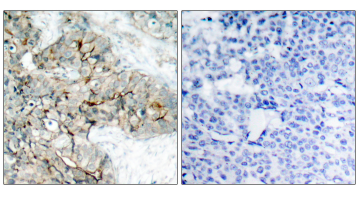
Organism	Gene ID	UniProt ID
Human	3690;	P05106;
Mouse	16416;	O54890;

Cellular Localization	Cell membrane ; Single-pass type I membrane protein . Cell projection , lamellipodium membrane . Cell junction , focal adhesion . Cell junction , synapse , postsynaptic cell membrane ; Single-pass type I membrane protein . Cell junction , synapse .
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.

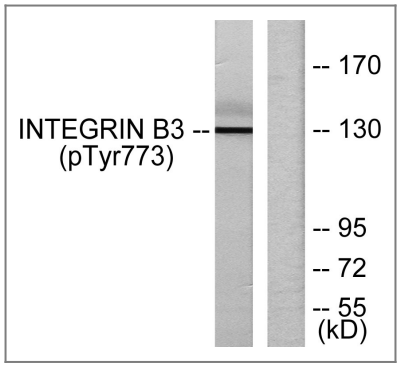
Function

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. Its inheritance is autosomal recessive. It is 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-IIIa complexes at their surface and lack fibrinogen and clot retraction capability. In type II , the platelets express the GPIIb-IIIa 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. ,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. ,online information:The Singapore human mutation and polymorphism database ,polymorphism:Position 169 is associated with platelet-specific alloantigen HPA-4 (PEN or YUK) . HPA-4A/PEN (A) /YUK (A) has Arg-169 and HPA-4B/PEN (B) /YUK (B) has Gln-169. HPA-4B is involved in neonatal alloimmune thrombocytopenia (NAIT or NATP) . ,polymorphism:Position 433 is associated with platelet-specific alloantigen MO. MO (-) has Pro-433 and MO (+) has Ala-433. MO (+) is involved in NAIT. ,polymorphism:Position 515 is associated with platelet-specific alloantigen CA/TU. CA (-) /TU (-) has Arg-515 and CA (+) /TU (+) has Gln-515. CA (+) is involved in NAIT. ,polymorphism:Position 59 is associated with platelet-specific alloantigen HPA-1 (ZW or PL (A)) . HPA-1A/ZW (A) /PL (A1) has Leu-59 and HPA-1B/ZW (B) /PL (A2) has Pro-59. ,polymorphism:Position 662 is associated with platelet-specific alloantigen SR (A) . SR (A) (-) has Arg-662 and SR (A) (+) has Cys-662. ,PTM: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. ,similarity:Belongs to the integrin beta chain family. ,similarity:Contains 1 VWFA domain. ,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 HIV-1 Tat. ,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. ,

Validation Data



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using Integrin beta3 (Phospho-Tyr773) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HL-60 cells treated with H2O2, using Integrin beta3 (Phospho-Tyr773) Antibody. The lane on the right is blocked with the phospho peptide.

Contact information

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Please scan the QR code to access additional product information:
Integrin β3 (Phospho Tyr773) Rabbit pAb

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