# abcam

## Product datasheet

## Anti-Integrin beta 3 antibody ab203122

## 2 Images

Overview

Product name Anti-Integrin beta 3 antibody

**Description** Rabbit polyclonal to Integrin beta 3

Host species Rabbit

Tested applications Suitable for: IHC-P, WB

Species reactivity Reacts with: Mouse, Human

Immunogen Synthetic peptide within Human Integrin beta 3 aa 1-100 conjugated to keyhole limpet

haemocyanin. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the

antibody for your needs, please contact our Scientific Support team to discuss your

requirements.

Database link: P05106

Run BLAST with
Run BLAST with

**Positive control** Mouse placenta lysate; Human rectal carcinoma tissue.

**General notes**The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

**Properties** 

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.02% Proclin 300

Constituents: 50% Glycerol (glycerin, glycerine), 1% BSA, 48.98% TBS, 1X

Purity Protein A purified

**Clonality** Polyclonal

1

**Isotype** IgG

## **Applications**

#### The Abpromise guarantee

Our Abpromise guarantee covers the use of ab203122 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/100 - 1/500.
WB		1/100 - 1/1000. Predicted molecular weight: 87 kDa.

### **Target**

#### **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-Ilb/beta-3 is a receptor for fibronectin, fibrinogen, plasminogen, prothrombin, thrombospondin and vitronectin. Integrins alpha-Ilb/beta-3 and alpha-V/beta-3 recognize the sequence R-G-D in a wide array of ligands. Integrin alpha-Ilb/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-Ilb/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.

#### Tissue specificity

lsoform 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.

#### Involvement in 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 Ilb/beta-3 complexes at their surface and lack fibrinogen and clot retraction capability. In type II, the platelets express the glycoprotein Ilb/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.

## Sequence similarities

Belongs to the integrin beta chain family.

Contains 1 VWFA domain.

# Post-translational modifications

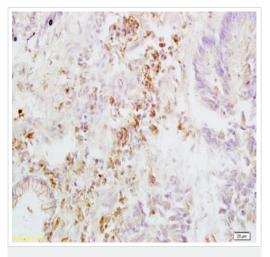
Phosphorylated on tyrosine residues in response to thrombin-induced platelet aggregation. Probably involved in outside-in signaling. A peptide (AA 740-762) is capable of binding GRB2 only when both Tyr-773 and Tyr-785 are phosphorylated. Phosphorylation of Thr-779 inhibits SHC

binding.

## **Cellular localization**

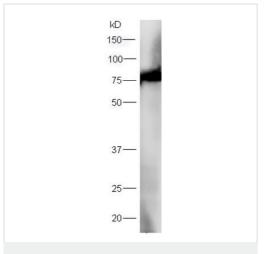
Membrane.

## **Images**



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Integrin beta 3 antibody (ab203122)

Immunohistochemical analysis of formalin-fixed, paraffin embedded Human rectal carcinoma tissue labeling Integrin beta 3 with ab203122 at 1/200 dilution, followed by conjugation to the secondary antibody and DAB staining.



Western blot - Anti-Integrin beta 3 antibody (ab203122)

Anti-Integrin beta 3 antibody (ab203122) at 1/300 dilution + Mouse placenta lysate

#### Secondary

Goat Anti-Rabbit IgG Antibody (H+L), HRP at 1/5000 dilution

Predicted band size: 87 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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