# abcam

#### Product datasheet

## Anti-Integrin beta 3 antibody [EPR2342] ab119992

ועלשעבע RabMAb

#### 29 References 画像数4

#### 製品の概要

製品名 Anti-Integrin beta 3 antibody [EPR2342]

製品の詳細 Rabbit monoclonal [EPR2342] to Integrin beta 3

由来種 Rabbit

アプリケーション 適用あり: Flow Cyt (Intra), WB, IP

種交差性 交差種: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール Flow Cyt (intra): HUVEC cells. IP: HUVEC whole cell lysate WB: U-87MG, HEL, HUVEC and

C2C12 whole cell lysate.

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS

精製度 Protein A purified

ポリモノ モノクローナル クローン名 **EPR2342** 

アイソタイプ lgG

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab119992の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/20.
WB		1/1000. Detects a band of approximately 110 kDa (predicted molecular weight: 87 kDa).
IP		1/20.

#### ターゲット情報

#### 機能

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-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.

#### 組織特異性

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.

#### 関連疾患

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.

#### 配列類似性

Belongs to the integrin beta chain family.

Contains 1 VWFA domain.

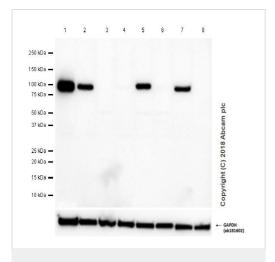
#### 翻訳後修飾

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.

#### 細胞内局在

Membrane.

#### 画像



Western blot - Anti-Integrin beta 3 antibody [EPR2342] (ab119992)

**All lanes :** Anti-Integrin beta 3 antibody [EPR2342] (ab119992) at 1/1000 dilution

**Lane 1 :** U-87MG (Human glioblastoma-astrocytoma epithelial cell) whole cell lysate

**Lane 2 :** HEL (Human Erythroleukemia erythroblast) whole cell lysate

Lane 3 : LnCaP (Human prostate carcinoma epithelial cell) whole cell lysate

**Lane 4 :** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 5 : HUVEC (Human umbilical vein endothelial cell) whole cell lysate

**Lane 6 :** PC-3 (Human prostate adenocarcinoma epithelial cell) whole cell lysate

Lane 7 : C2C12 (Mouse myoblasts myoblast) whole cell lysateLane 8 : Raw264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) whole cell lysate

Lysates/proteins at 20 µg per lane.

#### **Secondary**

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/20000 dilution

**Predicted band size:** 87 kDa **Observed band size:** 110 kDa

Exposure time: 40 seconds

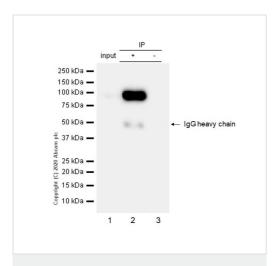
Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM/TBST.

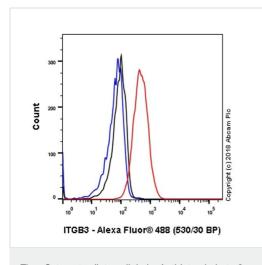
ab181602 was used as a loading control.

LnCaP, HeLa and PC-3 are low expression cell lines (PMID: 21867506, PMID: 25248000).

Though there are publications stating expression of Integrin beta 3 in RAW264.7, ab119992 and <u>ab179473</u> show negative in Raw264.7.



Immunoprecipitation - Anti-Integrin beta 3 antibody [EPR2342] (ab119992)



Flow Cytometry (Intracellular) - Anti-Integrin beta 3 antibody [EPR2342] (ab119992)

Purified ab119992 at 1:20 dilution  $(0.7\mu g)$  immunoprecipitating Integrin beta 3 in HUVEC whole cell lysate.

Lane 1 (input): HUVEC (Human umbilical vein endothelial cell) whole cell lysate 10µg.

Lane 2 (+): ab119992 + HUVEC whole cell lysate.

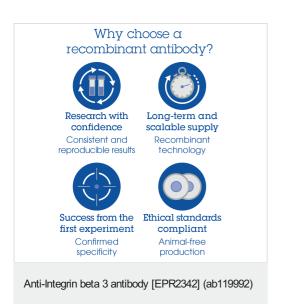
Lane 3 (-): Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab119992 in HUVEC whole cell lysate.

VeriBlot for IP Detection Reagent (HRP)(<u>ab131366</u>) (1:1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDM/TBST. Diluting buffer and concentration: 5% NFDM/TBST.

Observed band size: 110 kDa

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol permeabilized HUVEC (Human umbilical vein endothelial cell) cell line labeling Integrin beta 3 with ab119992 at 1/20 (red) compared with a Rabbit monoclonal IgG (ab172730) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat anti rabbit IgG (Alexa Fluor<sup>®</sup> 488, ab150077), at 1/2000 dilution was used as the secondary antibody.



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

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.co.jp/abpromise">https://www.abcam.co.jp/abpromise</a> or contact our technical team.

#### Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors