

## Product datasheet

### Anti-Integrin beta 4 antibody [EPR8559] ab133682

Recombinant RabMAb

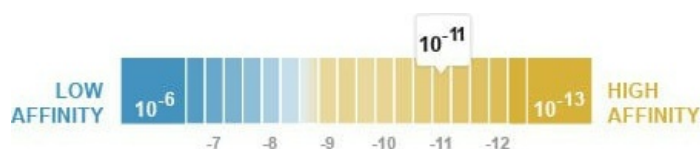
★★★★★ [1 Abreviews](#) [11 References](#) [5 Images](#)

#### Overview

<b>Product name</b>	Anti-Integrin beta 4 antibody [EPR8559]
<b>Description</b>	Rabbit monoclonal [EPR8559] to Integrin beta 4
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, ICC/IF <b>Unsuitable for:</b> Flow Cyt, IHC-P or IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide within Human Integrin beta 4 aa 1750-1850 (C terminal). The exact sequence is proprietary.
<b>Positive control</b>	BxPC-3 and SW480 cell lysates; BxPC-3 cells
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Dissociation constant (K<sub>D</sub>)</b>	K <sub>D</sub> = 9.70 x 10 <sup>-11</sup> M



[Learn more about K<sub>D</sub>](#)

<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR8559
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab133682 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

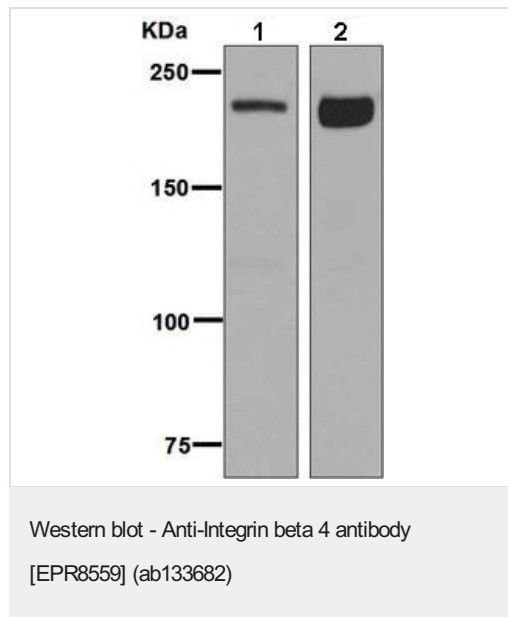
Application	Abreviews	Notes
WB		1/1000 - 1/10000. Predicted molecular weight: 202 kDa.
ICC/IF	★★★★★ (1)	1/250 - 1/500.

**Application notes** Is unsuitable for Flow Cyt, IHC-P or IP.

## Target

<b>Function</b>	Integrin alpha-6/beta-4 is a receptor for laminin. It plays a critical structural role in the hemidesmosome of epithelial cells.
<b>Tissue specificity</b>	Integrin alpha-6/beta-4 is predominantly expressed by epithelia. Isoform beta-4D is also expressed in colon and placenta. Isoform beta-4E is also expressed in epidermis, lung, duodenum, heart, spleen and stomach.
<b>Involvement in disease</b>	Defects in ITGB4 are a cause of epidermolysis bullosa letalis with pyloric atresia (EB-PA) [MIM:226730]; also known as junctional epidermolysis bullosa with pyloric atresia (PA-JEB) or aplasia cutis congenita with gastrointestinal atresia. EB-PA is an autosomal recessive, frequently lethal, epidermolysis bullosa with variable involvement of skin, nails, mucosa, and with variable effects on the digestive system. It is characterized by mucocutaneous fragility, aplasia cutis congenita, and gastrointestinal atresia, which most commonly affects the pylorus. Pyloric atresia is a primary manifestation rather than a scarring process secondary to epidermolysis bullosa. Defects in ITGB4 are a cause of generalized atrophic benign epidermolysis bullosa (GABEB) [MIM:226650]. GABEB is a non-lethal, adult form of junctional epidermolysis bullosa characterized by life-long blistering of the skin, associated with hair and tooth abnormalities.
<b>Sequence similarities</b>	Belongs to the integrin beta chain family. Contains 1 Calx-beta domain. Contains 4 fibronectin type-III domains. Contains 1 PSI domain. Contains 1 VWFA domain.
<b>Domain</b>	The fibronectin type-III-like domains bind BPAG1 and plectin and probably also recruit BP230.

## Images



**All lanes :** Anti-Integrin beta 4 antibody [EPR8559] (ab133682) at 1/1000 dilution

**Lane 1 :** BxPC-3 cell lysate

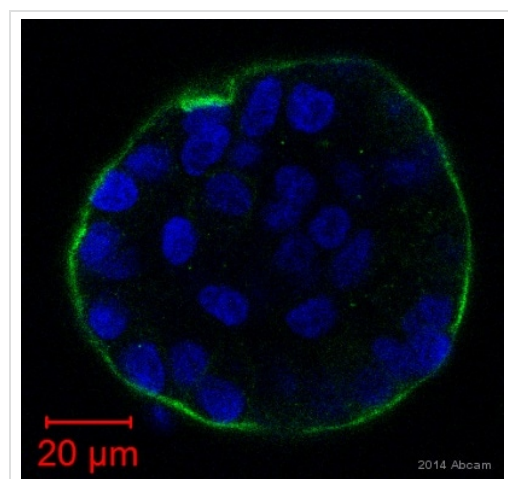
**Lane 2 :** SW480 cell lysate

Lysates/proteins at 10 µg/ml per lane.

**Secondary**

**All lanes :** HRP labelled goat anti-rabbit at 1/2000 dilution

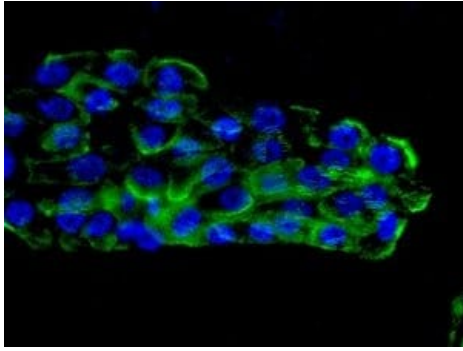
**Predicted band size:** 202 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Integrin beta 4 antibody [EPR8559] (ab133682)

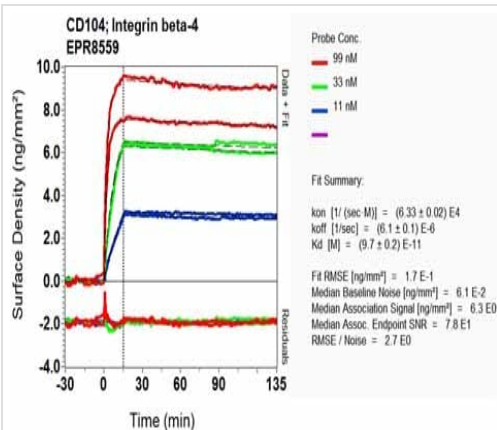
This image is courtesy of an Abreview submitted by Qingsu Cheng

ab133682 staining Integrin beta 4 in human breast epithelial cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with Triton X-100 and blocked with 1% serum for 1 hour at 25°C. Samples were incubated with primary antibody (1/500 in blocking solution) for 1 hour at 25°C. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG polyclonal (1/100) was used as the secondary antibody.



Immunofluorescent analysis of BxPC-3 cells labelling Integrin beta 4 with ab133682 at 1/250 dilution.

Immunocytochemistry/ Immunofluorescence - Anti-Integrin beta 4 antibody [EPR8559] (ab133682)



Equilibrium dissociation constant ( $K_D$ )

Learn more about  $K_D$

[Click here to learn more about  \$K\_D\$](#)

SPR Scanning - Anti-Integrin beta 4 antibody [EPR8559] (ab133682)

Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Integrin beta 4 antibody [EPR8559] (ab133682)

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

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