

## Product datasheet

# Anti-Integrin alpha V antibody [EPR16800] ab179475

Recombinant RabMAb

★★★★★ 6 Abreviews 35 References 10 Images

### Overview

<b>Product name</b>	Anti-Integrin alpha V antibody [EPR16800]
<b>Description</b>	Rabbit monoclonal [EPR16800] to Integrin alpha V
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP, ICC/IF, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: HUVEC, HT-29, A549, C6 and NIH/3T3 whole cell lysates; Human fetal kidney and fetal brain lysates; Mouse brain, kidney and spleen lysates; Rat brain and kidney lysates. IHC: Human kidney, human transitional cell carcinoma of bladder and mouse kidney tissues. ICC/IF: A549 cells. IP: A549 whole cell extract.
<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>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR16800

Isotype

IgG

## Applications

### The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab179475 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	★★★★★ (2)	1/5000. Detects a band of approximately 125, 135 kDa (predicted molecular weight: 116 kDa).
IP		1/40.
ICC/IF	★★★★★ (3)	1/500.
IHC-P	★★★★★ (1)	1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

## Target

### Function

The alpha-V integrins are receptors for vitronectin, cytotactin, fibronectin, fibrinogen, laminin, matrix metalloproteinase-2, osteopontin, osteomodulin, prothrombin, thrombospondin and vWF. They recognize the sequence R-G-D in a wide array of ligands. In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions.

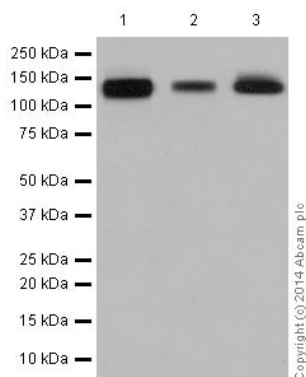
### Sequence similarities

Belongs to the integrin alpha chain family.  
Contains 7 FG-GAP repeats.

### Cellular localization

Membrane.

## Images



Western blot - Anti-Integrin alpha V antibody [EPR16800] (ab179475)

**All lanes :** Anti-Integrin alpha V antibody [EPR16800] (ab179475) at 1/50000 dilution

**Lane 1 :** HUVEC (Human umbilical vein endothelial cell line) whole cell lysates

**Lane 2 :** HT-29 (Human colorectal adenocarcinoma cells) whole cell lysates

**Lane 3 :** A549 (Human lung carcinoma) whole cell lysates

Lysates/proteins at 20 µg per lane.

### Secondary

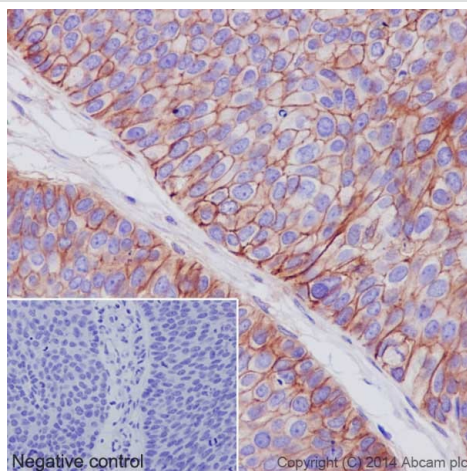
**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 116 kDa

**Observed band size:** 125 kDa

**Blocking/dilution buffer:** 5% NFDm/TBST.

ab179475 can recognize 135kDa full length Integrin alpha V and 125kDa heavy chain. The 125 kDa band is Integrin alpha V heavy chain.



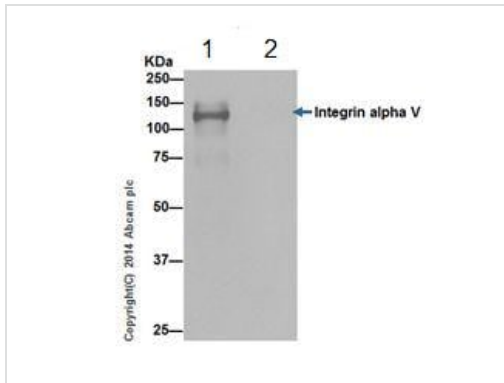
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Integrin alpha V antibody [EPR16800] (ab179475)

Immunohistochemical analysis of paraffin-embedded human transitional cell carcinoma of bladder tissue labeling Integrin alpha V with ab179475 at 1/500 dilution followed by Goat Anti-Rabbit HRP (IgG H&L) (ab97051) secondary antibody at 1/500 dilution.

Membrane and weak cytoplasm staining on human transitional cell carcinoma of bladder is observed. Counterstained with hematoxylin.

**Negative control:** Using PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-Integrin alpha V antibody [EPR16800] (ab179475)

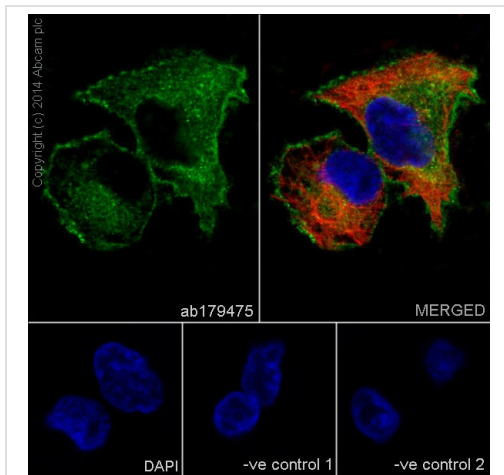
Integrin alpha V was immunoprecipitated from 1 mg of A549 (Human lung carcinoma) whole cell extract with ab179475 at 1/40 dilution. Western blot analysis was performed from the immunoprecipitate using ab179475 at 1/1000 dilution. Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG, was used as secondary antibody at 1/1500 dilution.

**Lane 1:** A549 whole cell extract.

**Lane 2:** PBS instead of A549 whole cell extract.

Blocking/Dilution buffer: 5% NFDm/TBST.

ab179475 can recognize 135kDa full length Integrin alpha V and 125kDa heavy chain. The 125 kDa band is Integrin alpha V heavy chain.



Immunocytochemistry/ Immunofluorescence - Anti-Integrin alpha V antibody [EPR16800] (ab179475)

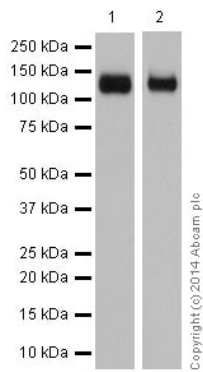
Immunofluorescent analysis of 100% methanol-fixed, 0.1% Triton X-100 permeabilized A549 (Human lung carcinoma) cells labeling Integrin alpha V with ab179475 at 1/500 dilution, followed by Goat anti-rabbit Alexa Fluor<sup>®</sup> 488 (IgG) (ab150077) secondary antibody at 1/400 dilution (green).

Confocal image showing membrane and cytoplasm staining on A549 cell line. The nuclear counterstain is DAPI (blue). Tubulin is detected with ab7291 (anti-Tubulin mouse mAb) at 1/500 dilution and ab150120 (goat anti-mouse AlexaFluor<sup>®</sup>594 secondary antibody) at 1/500 dilution (red).

The negative controls are as follows:

**-ve control 1:** ab179475 at 1/500 dilution followed by ab150120 (AlexaFluor<sup>®</sup>594 Goat anti-Mouse secondary) at 1/500 dilution.

**-ve control 2:** ab7291 (anti-Tubulin mouse mAb) at 1/500 dilution followed by ab150077 (Alexa Fluor<sup>®</sup>488 Goat Anti-Rabbit IgG H&L) at 1/400 dilution.



Western blot - Anti-Integrin alpha V antibody  
[EPR16800] (ab179475)

**All lanes** : Anti-Integrin alpha V antibody [EPR16800] (ab179475)  
at 1/5000 dilution

**Lane 1** : Human fetal kidney lysates

**Lane 2** : Human fetal brain lysates

Lysates/proteins at 10  $\mu$ g per lane.

#### **Secondary**

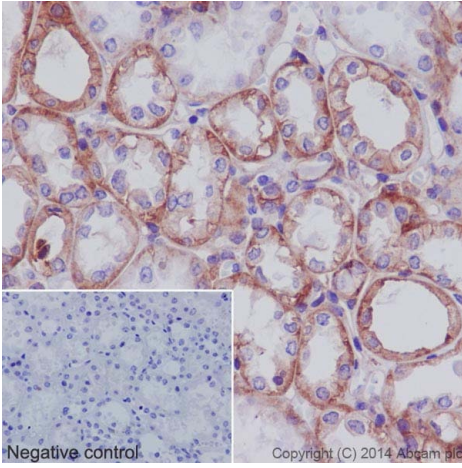
**All lanes** : Anti-Rabbit IgG (HRP), specific to the non-reduced form  
of IgG at 1/1000 dilution

**Predicted band size:** 116 kDa

**Observed band size:** 125 kDa

**Blocking/dilution buffer:** 5% NFDm/TBST.

ab179475 can recognize 135kDa full length Integrin alpha V and  
125kDa heavy chain. The 125 kDa band is Integrin alpha V heavy  
chain.



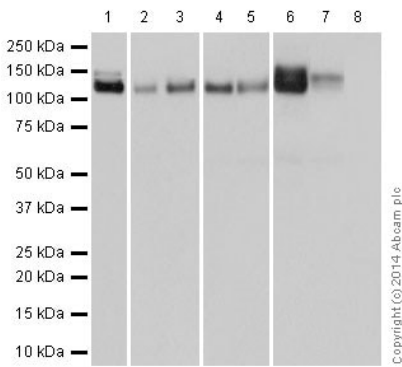
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Integrin alpha V antibody [EPR16800] (ab179475)

Immunohistochemical analysis of paraffin-embedded human kidney tissue labeling Integrin alpha V with ab179475 at 1/500 dilution followed by Goat Anti-Rabbit HRP (IgG H&L) (ab97051) secondary antibody at 1/500 dilution.

Membrane and cytoplasm staining on human kidney tubules is observed. Counterstained with hematoxylin.

**Negative control:** Using PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-Integrin alpha V antibody [EPR16800] (ab179475)

**All lanes :** Anti-Integrin alpha V antibody [EPR16800] (ab179475) at 1/5000 dilution

**Lane 1 :** Mouse brain lysates

**Lane 2 :** Mouse kidney lysates

**Lane 3 :** Mouse spleen lysates

**Lane 4 :** Rat brain lysates

**Lane 5 :** Rat kidney lysates

**Lane 6 :** C6 (Rat glial tumor cells) whole cell lysates

**Lane 7 :** NIH/3T3 (Mouse embryo fibroblast cells) whole cell lysates

**Lane 8 :** Raji (Human Burkitt's lymphoma cell line) whole cell lysates

Lysates/proteins at 10 µg per lane.

### Secondary

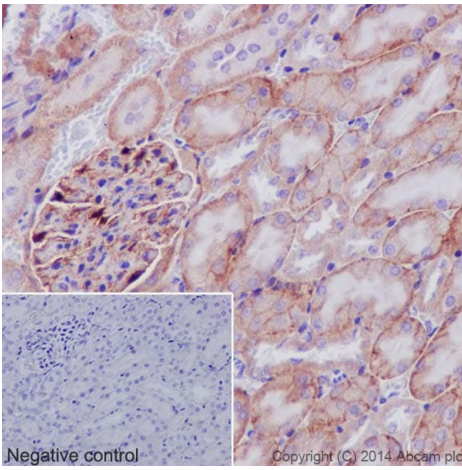
**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 116 kDa

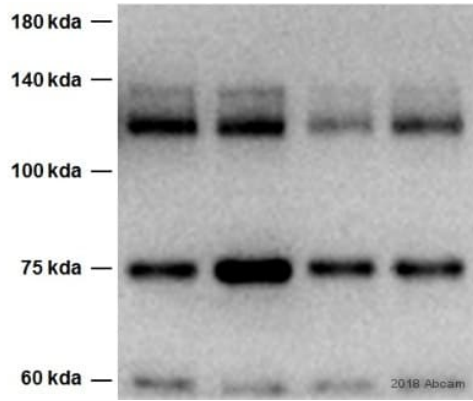
**Observed band size:** 125, 135 kDa

**Blocking/dilution buffer:** 5% NFDm/TBST.

ab179475 can recognize 135kDa full length Integrin alpha V and 125kDa heavy chain. The 125 kDa band is Integrin alpha V heavy chain.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Integrin alpha V antibody [EPR16800] (ab179475)



Western blot - Anti-Integrin alpha V antibody [EPR16800] (ab179475)

This image is courtesy of an anonymous Abreview.

Immunohistochemical analysis of paraffin-embedded mouse kidney tissue labeling Integrin alpha V with ab179475 at 1/500 dilution followed by Goat Anti-Rabbit HRP (IgG H&L) (ab97051) secondary at 1/500 dilution.

Membrane and cytoplasm staining on mouse kidney tubule and glomerulus is observed. Counterstained with hematoxylin.

**Negative control:** Using PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

**All lanes :** Anti-Integrin alpha V antibody [EPR16800] (ab179475) at 1/2000 dilution (8 hours at 4°C)

**All lanes :** Mouse skin whole cell lysate

Lysates/proteins at 40 µg per lane.

**Secondary**

**All lanes :** Goat anti-Rabbit IgG(H+L)-HRP at 1/5000 dilution

Developed using the ECL technique.

**Predicted band size:** 116 kDa

**Exposure time:** 25 seconds

Diluent: 2% BSA in 1X TBST.

Blocked using 5% BSA for 1 hour at RT.

### 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 alpha V antibody [EPR16800]  
(ab179475)

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

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