abcam

Product datasheet

Anti-Integrin alpha 6 antibody [EPR18124] ab181551





重组 RabMAb

★★★★★ 5 Abreviews 32 References 12 图像

概述

产品名称 Anti-Integrin alpha 6抗体[EPR18124]

描述 兔单克隆抗体[EPR18124] to Integrin alpha 6

宿主 Rabbit

经测试应用 适用于: WB, IHC-P, IHC-Fr 种属反应性 与反应: Mouse, Rat, Human

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

阳性对照 WB: SW480, A549, F6 whole cell lysates; Mouse skin lysate and Rat skin lysate, Human fetal

> kidney tissue lysate, Mouse kidney and spleen tissue lysate, Rat spleen tissue lysate. IHC-P: Human breast tissue, Human endometrial cancer tissue, Mouse stomach tissue, Rat stomach

tissue. IHC-Fr: Rat and mouse stomach tissues.

常规说明 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**.

性能

形式

存放说明 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.

Preservative: 0.01% Sodium azide 存储溶液

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

纯度 Protein A purified

克隆 单克隆 克隆编号 EPR18124

同种型 lgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab181551于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	****(1)	1/2000. Detects a band of approximately 127 kDa (predicted molecular weight: 127 kDa).
ІНС-Р	★★★★☆ (3)	1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IHC-Fr	★★★☆☆ (1)	1/100.

靶标

功能 Integrin alpha-6/beta-1 is a receptor for laminin on platelets. Integrin alpha-6/beta-4 is a receptor

for laminin in epithelial cells and it plays a critical structural role in the hemidesmosome (By similarity). ITGA6:ITGB4 binds to NRG1 (via EGF domain) and this binding is essential for NRG1-ERBB signaling (PubMed:20682778). ITGA6:ITGB4 binds to IGF1 and this binding is essential

for IGF1 signaling (PubMed:22351760).

组织**特异性** Integrin alpha-6/beta-4 is predominantly expressed by epithelia. Isoforms containing segment X1

are ubiquitously expressed. Isoforms containing segment X1X2 are expressed in heart, kidney, placenta, colon, duodenum, myoblasts and myotubes, and in a limited number of cell lines; they are always coexpressed with the ubiquitous isoform containing segment X1. In some tissues (e.g. Salivary gland), isoforms containing cytoplasmic segment A and isoforms containing segment B are detected while in others, only isoforms containing one cytoplasmic segment are found

(segment A in epidermis and segment B in kidney).

疾病相关 Epidermolysis bullosa letalis, with pyloric atresia

序列相似性 Belongs to the integrin alpha chain family.

Contains 7 FG-GAP repeats.

翻译后修饰 Isoforms containing segment A, but not segment B, are the major targets for PMA-induced

phosphorylation. Phosphorylation occurs on 'Ser-1103' of isoform alpha-6X1X2A.

Phosphorylation is not required for the induction of integrin alpha-6A/beta-1 high affinity but may

reduce the affinity for ligand.

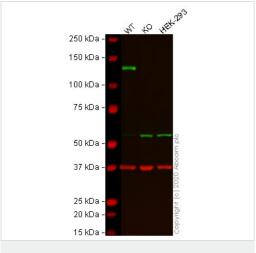
In invasive prostate cancer ITGA6 undergoes PLAU-mediated cleavage at residues Arg-634-

635-Arg in a time-dependent manner enhancing cell invasion and migration in vitro.

Palmitoylation by DHHC3 enhances stability and cell surface expression.

细胞定位 Cell membrane. Cell membrane.

图片



Western blot - Anti-Integrin alpha 6 antibody [EPR18124] (ab181551)

All lanes : Anti-Integrin alpha 6 antibody [EPR18124] (ab181551) at 1/2000 dilution

Lane 1: Wild-type SW480 cell lysate

Lane 2: ITGA6 knockout SW480 cell lysate

Lane 3: HEK-293 cell lysate

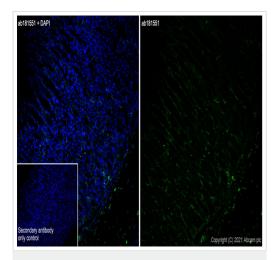
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 127 kDa Observed band size: 130 kDa

Lanes 1 - 3: Merged signal (red and green). Green - ab181551 observed at 130 kDa. Red - loading control <u>ab8245</u> (Mouse anti-GAPDH antibody [6C5]) observed at 37kDa.

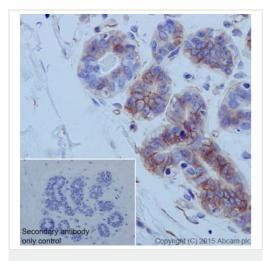
ab181551 was shown to react with Integrin alpha 6 in wild-type SW480 cells in western blot with loss of signal observed in ITGA6 knockout cell line ab265838 (knockout cell lysate ab256957). Wild-type and ITGA6 knockout SW480 cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3% milk in TBS-T (0.1% Tween[®]) before incubation with ab181551 and ab8245 (Mouse anti-GAPDH antibody [6C5]) overnight at 4°C at a 1 in 2000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit lgG H&L (IRDye[®] 800CW) preabsorbed (ab216773) and Goat anti-Mouse lgG H&L (IRDye[®] 680RD) preabsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Frozen sections) - Anti-Integrin alpha 6 antibody [EPR18124] (ab181551)

Immunohistochemistry (Frozen sections) analysis of rat stomach tissue (4% PFA, 0.2% Tritron x-100) labelling Integrin alpha 6 with **ab240252** at 1/100 dilution. **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) was used as the secondary antibody at 1/1000 dilution. Negative control using PBS instead of primary antibody (left). Counterstained with DAPI.

Positive staining was seen on rat stomach.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Integrin alpha 6 antibody [EPR18124] (ab181551)

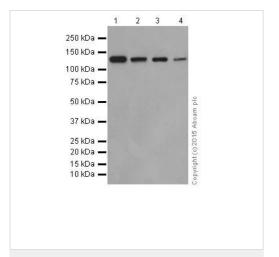
Immunohistochemical analysis of paraffin-embedded Human breast tissue labeling Intergrin alpha 6 with ab181551 at 1/500 followed by Goat Anti-Rabbit IgG (HRP) at 1/500.

Membrane and cytoplasm staining on epithelial cells of Human breast tissue is observed.

Counter stained with Hematoxylin.

Negative control: Used PBS instead of primary antibody followed by Goat Anti-Rabbit IgG (HRP) at 1/500.

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



Western blot - Anti-Integrin alpha 6 antibody [EPR18124] (ab181551)

All lanes : Anti-Integrin alpha 6 antibody [EPR18124] (ab181551) at 1/10000 dilution

Lane 1 : SW480 (Human colon adenocarcinoma cell line) whole cell lysate

Lane 2: A549 (Human lung carcinoma) whole cell lysate

Lane 3 : Mouse skin lysate

Lane 4: Rat skin lysate

Lysates/proteins at 20 µg per lane.

Secondary

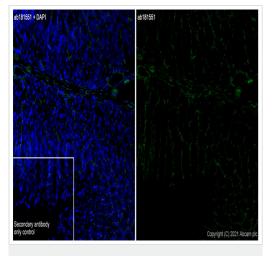
All lanes : Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/1000 dilution

Developed using the ECL technique.

Predicted band size: 127 kDa **Observed band size:** 127 kDa

Exposure time: 3 minutes

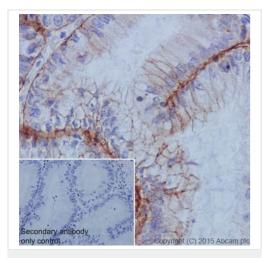
Blocking and diluting buffer was 5% NFDM /TBST.



Immunohistochemistry (Frozen sections) - Anti-Integrin alpha 6 antibody [EPR18124] (ab181551)

Immunohistochemistry (Frozen sections) analysis of mouse stomach tissue (4% PFA, 0.2% Tritron x-100) labelling Integrin alpha 6 with ab240252 at 1/100 dilution. ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) was used as the secondary antibody at 1/1000 dilution. Negative control using PBS instead of primary antibody (left). Counterstained with DAPI.

Positive staining was seen on mouse stomach.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Integrin alpha 6 antibody [EPR18124] (ab181551)

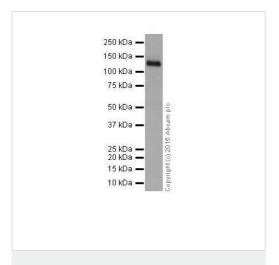
Immunohistochemical analysis of paraffin-embedded Human endometrial cancer tissue labeling Intergrin alpha 6 with ab181551 at 1/500 followed by Goat Anti-Rabbit IgG (HRP) at 1/500.

Membrane and cytoplasm staining on tumor cells of Human endometrial cancer tissue is observed.

Counter stained with Hematoxylin.

Negative control: Used PBS instead of primary antibody followed by Goat Anti-Rabbit IgG (HRP) at 1/500.

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



Western blot - Anti-Integrin alpha 6 antibody [EPR18124] (ab181551) Anti-Integrin alpha 6 antibody [EPR18124] (ab181551) at 1/2000 dilution + Human fetal kidney tissue lysate at 10 μg

Secondary

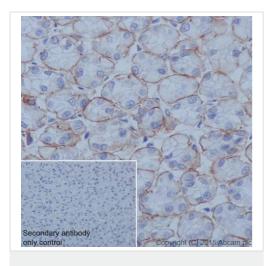
Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG at 1/1000 dilution

Developed using the ECL technique.

Predicted band size: 127 kDa **Observed band size:** 127 kDa

Exposure time: 3 minutes

Blocking and diluting buffer was 5% NFDM /TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Integrin alpha 6 antibody [EPR18124] (ab181551)

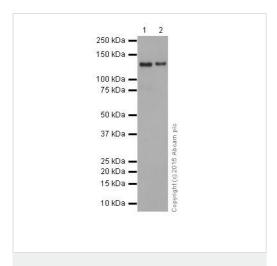
Immunohistochemical analysis of paraffin-embedded Rat stomach tissue labeling Intergrin alpha 6 with ab181551 at 1/500 followed by Goat Anti-Rabbit IgG (HRP) at 1/500.

Basement membrane staining on tumor cells of Rat stomach tissue is observed.

Counter stained with Hematoxylin.

Negative control: Used PBS instead of primary antibody followed by Goat Anti-Rabbit IgG (HRP) at 1/500.

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



Western blot - Anti-Integrin alpha 6 antibody [EPR18124] (ab181551) **All lanes :** Anti-Integrin alpha 6 antibody [EPR18124] (ab181551) at 1/2000 dilution

Lane 1 : Mouse kidney tissue lysate
Lane 2 : Mouse spleen tissue lysate

Lysates/proteins at 10 µg per lane.

Secondary

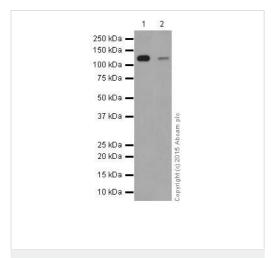
All lanes : Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/1000 dilution

Developed using the ECL technique.

Predicted band size: 127 kDa **Observed band size:** 127 kDa

Exposure time: 10 seconds

Blocking and diluting buffer was 5% NFDM /TBST



Western blot - Anti-Integrin alpha 6 antibody [EPR18124] (ab181551) **All lanes :** Anti-Integrin alpha 6 antibody [EPR18124] (ab181551) at 1/10000 dilution

Lane 1 : F9 (mouse embryo testicular cancer cell line) whole cell lysate

Lane 2: Rat spleen tissue lysate

Lysates/proteins at 10 µg per lane.

Secondary

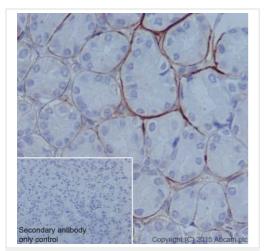
All lanes : Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/1000 dilution

Developed using the ECL technique.

Predicted band size: 127 kDa Observed band size: 127 kDa

Exposure time: 3 minutes

Blocking and diluting buffer was 5% NFDM /TBST



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Integrin alpha 6 antibody [EPR18124] (ab181551)

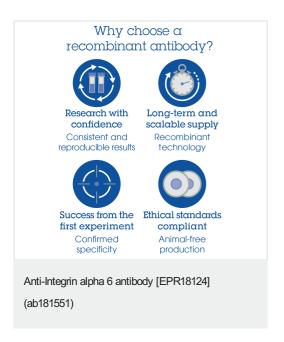
Immunohistochemical analysis of paraffin-embedded Mouse stomach tissue labeling Intergrin alpha 6 with ab181551 at 1/500 followed by Goat Anti-Rabbit IgG (HRP) at 1/500.

Basement membrane staining on tumor cells of Mouse stomach tissue is observed.

Counter stained with Hematoxylin.

Negative control: Used PBS instead of primary antibody followed by Goat Anti-Rabbit IgG (HRP) at 1/500.

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



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 https://www.abcam.cn/abpromise or contact our technical team.

Terms and conditions

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