# abcam

# Product datasheet

# Anti-Paxillin antibody [E228] ab32115





重组 RabMAb

#### 12 References 14 图像

概述

产品名称 Anti-Paxillin抗体[E228]

描述 兔单克隆抗体[E228] to Paxillin

宿主 Rabbit

特异性 The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for

适用于: WB, ICC/IF, IHC-P, IP, Flow Cyt (Intra), Dot blot, ELISA 经测试应用

与反应: Mouse, Rat, Human 种属反应性

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

阳性对照 WB: HeLa, NIH 3T3, HEK-293, C2C12, A431, PC-3 and Rat-1 whole cell lysates. ICC/IF: HeLa

cells. IHC-P: Human colon and breast carcinoma. Flow Cyt (intra): HeLa cells. IP: HEK-293 cell

lysate.

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 Liquid

Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles. 存放说明

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

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

纯度 Protein A purified

单克隆 克隆

**克隆编号** E228

**同种型** IgG

#### 应用

#### The Abpromise guarantee Abpromise™承诺保证使用ab32115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		1/10000. Predicted molecular weight: 64 kDa.
ICC/IF		1/100. For unpurified use at 1/250
IHC-P		1/50. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.  See IHC antigen retrieval protocols.  For unpurified use at 1/100 - 1/250
IP		1/20. For unpurified use at 1/100
Flow Cyt (Intra)		1/20.
Dot blot		1/1000.
ELISA		Use at an assay dependent concentration.

# 靶标

功能 Cytoskeletal protein involved in actin-membrane attachment at sites of cell adhesion to the

extracellular matrix (focal adhesion).

序列相似性 Belongs to the paxillin family.

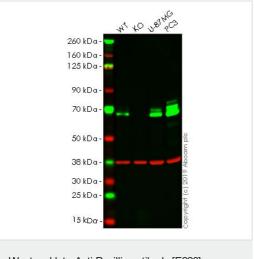
Contains 4 LIM zinc-binding domains.

翻译后修饰 Phosphorylated on tyrosine residues during integrin-mediated cell adhesion, embryonic

 $development, fibroblast\ transformation\ and\ following\ stimulation\ of\ cells\ by\ mitogens.$ 

细胞定位 Cytoplasm > cytoskeleton. Cell junction > focal adhesion.

# 图片



Western blot - Anti-Paxillin antibody [E228] (ab32115)

**All lanes :** Anti-Paxillin antibody [E228] (ab32115) at 1/10000 dilution

Lane 1: Wild-type A431 whole cell lysate

Lane 2: PXN knockout A431 whole cell lysate

Lane 3: U-87 MG whole cell lysate

Lane 4: PC-3 whole cell lysate

Lysates/proteins at 20 µg per lane.

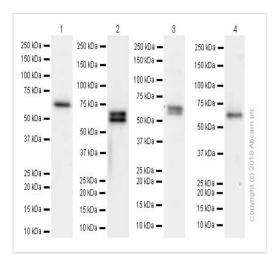
Performed under reducing conditions.

**Predicted band size:** 64 kDa **Observed band size:** 65 kDa

Exposure time: 10 seconds

**Lanes 1 - 4:** Merged signal (red and green). Green - ab32115 observed at 65 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab32115 was shown to specifically react with PXN in wild-type A431 cells as signal was lost in PXN knockout cells. Wild-type and PXN knockout samples were subjected to SDS-PAGE. The membrane was blocked with 3% Milk. Ab32115 and <a href="mailto:ab8245">ab8245</a> (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/10000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preabsorbed <a href="mailto:ab216773">ab216773</a> and Goat anti-Mouse lgG H&L (IRDye® 680RD) preabsorbed <a href="mailto:ab216776">ab216776</a> secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Paxillin antibody [E228] (ab32115)

**All lanes :** Anti-Paxillin antibody [E228] (ab32115) at 1/1000 dilution (purified)

Lane 1: HEK-293 (Human embryonic kidney) whole cell lysates
Lane 2: NIH/3T3 (Mouse embryonic fibroblast) whole cell lysates
Lane 3: C2C12 (Mouse myoblasts myoblast) whole cell lysates
Lane 4: Rat-1 (Rat embryonic fibroblast) whole cell lysates

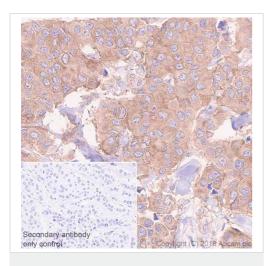
Lysates/proteins at 15 µg per lane.

#### **Secondary**

All lanes: Goat Anti-Rabbit lgG H&L (HRP) (ab97051)

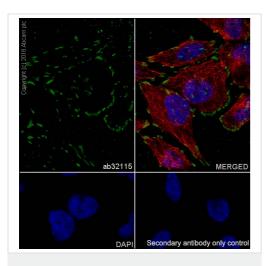
**Predicted band size:** 64 kDa **Observed band size:** 60,64 kDa

Based on the immunogen sequence blast, this antibody recognizes alpha, beta and gamma isoforms. The molecular weight observed is consistent with what has been described in the literature PMID: 9712867 and 20388733



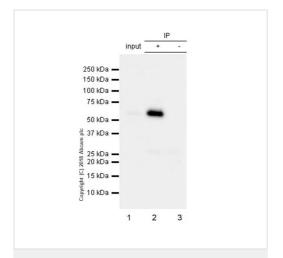
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Paxillin antibody [E228] (ab32115)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human breast carcinoma tissue sections labeling Paxillin with Purified ab32115 at 1:50 dilution (2.34 µg/ml). Heat mediated antigen retrieval was performed using ab93684 (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use)was used. Negative control:PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunocytochemistry/ Immunofluorescence - Anti-Paxillin antibody [E228] (ab32115)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Paxillin with Purified ab32115 at 1:100 dilution (1.2  $\mu$ g/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5  $\mu$ g/ml). Goat anti rabbit lgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1:1000 (2  $\mu$ g/ml) dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunoprecipitation - Anti-Paxillin antibody [E228] (ab32115)

ab32115 (purified) at 1:20 dilution ( $0.5\mu g$ ) immunoprecipitating Paxillin in HEK-293 whole cell lysate.

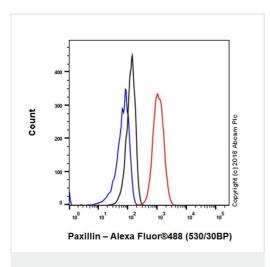
Lane 1 (input): HEK-293 (Human embryonic kidney epithelial cell) whole cell lysate 10µg

Lane 2 (+): ab32115 & HEK-293 whole cell lysate

Lane 3 (-): Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab32115 in HEK-293 whole cell lysate

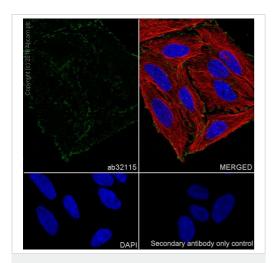
For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.



Flow Cytometry (Intracellular) - Anti-Paxillin antibody [E228] (ab32115)

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Paxillin with Purified ab32115 at 1/20 dilution (10µg/ml) (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit lgG (Alexa Fluorr® 488, ab150077) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal lgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunocytochemistry/ Immunofluorescence - Anti-Paxillin antibody [E228] (ab32115)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling Paxillin with ab32115 at 1/100 (1 µg/ml). Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. <a href="mailto:ab150077">ab150077</a>, an Alexa Fluor<sup>®</sup> 488-conjugated goat anti-rabbit lgG (1/1000, 2 µg/ml) was used as the secondary antibody. The cells were counterstained with <a href="mailto:ab195889">ab195889</a>, anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at 1/200, 2.5 µg/ml. Nuclei counterstained with DAPI (blue).

Confocal image showing membranous staining on HeLa cells.



Western blot - Anti-Paxillin antibody [E228] (ab32115)

**All lanes :** Anti-Paxillin antibody [E228] (ab32115) at 1/1000 dilution

**Lane 1**: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: HEK-293 (human embryonic kidney) whole cell lysates

Lysates/proteins at 15 µg per lane.

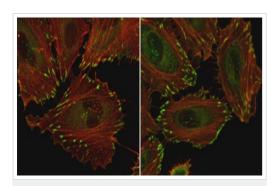
#### Secondary

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

Predicted band size: 64 kDa Observed band size: 64 kDa

Exposure time: 3 minutes

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

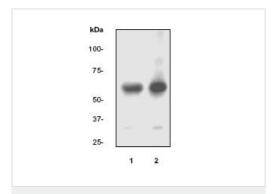


Immunocytochemistry/ Immunofluorescence - Anti-Paxillin antibody [E228] (ab32115)

Image from Beheshti Zavareh R et al., PLoS One. 2012;7(9):e43721. doi: 10.1371/journal.pone.0043721. Epub 2012 Sep 5. Fig 3.; doi:10.1371/journal.pone.0043721; September 5, 2012, PLoS ONE 7(9): e43721.

Immunofluorescence analysis of HeLa cells, staining Paxillin with ab32115.

Cells on the right were treated with MGAT1 shRNA. Cells were fixed with 2% paraformaldehyde, permeabilized using 0.2% Triton-X-100 and blocked by 5% BSA for 1 hour. Cells were incubated with primary antibody (1/400) overnight at 4°C. A FITC-conjugated donkey anti-rabbit IgG (1/500) was used as the secondary antibody.



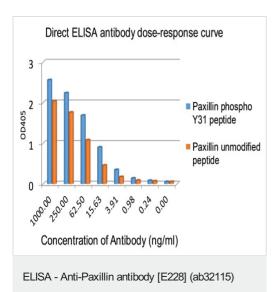
Western blot - Anti-Paxillin antibody [E228] (ab32115)

**All lanes :** Anti-Paxillin antibody [E228] (ab32115) at 1/10000 dilution

Lane 1: untreated NIH 3T3 cell lysate

Lane 2: PDGF treated NIH 3T3 cell lysate

**Predicted band size:** 64 kDa **Observed band size:** 64 kDa



Direct ELISA antigen dose-response curve using ab32115 at 0-1000 ng/mL. Antigen (human Paxillin phospho Y31 peptide/ unmodified peptide) concentration of 1000 ng/mL. An alkaline phosphatase-conjugated goat anti-rabbit lgG (H+L) (1/2500) was used as the secondary antibody.

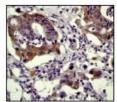


Dot blot analysis of Paxillin (pY31) peptide (Lane 1) and Paxillin non-phospho peptide (Lane 2) labelling Paxillin with ab32115 at a dilution of 1/1000. ab97051 (Peroxidase conjugated goat antirabbit lgG (H+L)) was used as the secondary antibody at a dilution of 1/100000.

Immunohistochemical analysis of Paxillin expression in paraffin-

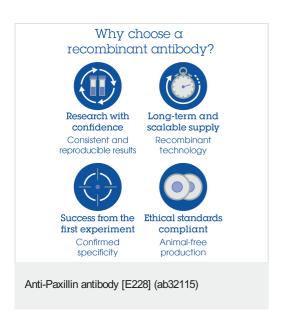
Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 3 minutes.



embedded human colon carcinoma using 1/100 ab32115.

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Paxillin antibody [E228] (ab32115)



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