# abcam

### **Product datasheet**

## Human PXN (Paxillin) knockout A-431 cell line ab261892

画像数 5

製品の概要

製品名	Human PXN (Paxillin) knockout A-431 cell line	
Parental Cell Line	A431	
Organism	Human Knockout achieved by CRISPR/Cas9; X = 7 bp deletion, 1 bp insertion; Frameshift = 99.7%	
Mutation description		
Passage number	<20	
Knockout validation	Next Generation Sequencing (NGS), Western Blot (WB)	
アプリケーション	適用あり: WB, Next Generation Sequencing	
Biosafety level	1	
特記事項	<b>Recommended control:</b> Human wild-type A-431 cell line ( <u>ab263975</u> ). Please note a wild-type cell line is not automatically included with a knockout cell line order, if required please add recommended wild-type cell line at no additional cost using the code WILDTYPE-TMTK1. <b>Cryopreservation cell medium:</b> Cell Freezing Medium-DMSO Serum free media, contains	
	8.7% DMSO in MEM supplemented with methyl cellulose.	
	Culture medium: DMEM (High Glucose) + 10% FBS	
	<b>Initial handling guidelines:</b> Upon arrival, the vial should be stored in liquid nitrogen vapor phase and not at -80°C. Storage at -80°C may result in loss of viability.	
	<ol> <li>Thaw the vial in 37°C water bath for approximately 1-2 minutes.</li> <li>Transfer the cell suspension (0.8 mL) to a 15 mL/50 mL conical sterile polypropylene centrifuge tube containing 8.4 mL pre-warmed culture medium, wash vial with an additional 0.8 mL culture medium (total volume 10 mL) to collect remaining cells, and centrifuge at 201 x g (rcf) for 5 minutes at room temperature. 10 mL represents minimum recommended dilution. 20 mL represents maximum recommended dilution.</li> <li>Resuspend the cell pellet in 5 mL pre-warmed culture medium and count using a baemocytometer or alternative cell counting method. Based on cell count, seed cells in an</li> </ol>	
	<ul> <li>haemocytometer or alternative cell counting method. Based on cell count, seed cells in an appropriate cell culture flask at a density of 2x10<sup>4</sup> cells/cm<sup>2</sup>. Seeding density is given as a guide only and should be scaled to align with individual lab schedules.</li> <li>4. Incubate the culture at 37°C incubator with 5% CO<sub>2</sub>. Cultures should be monitored daily.</li> </ul>	
	Subculture guidelines:	
	All seeding densities should be based on cell counts gained by established methods. A guide seeding density of 2x10 <sup>4</sup> cells/cm <sup>2</sup> is recommended. A partial media change 24 hours prior to subculture may be helpful to encourage growth, if required.	

Cells should be passaged when they have achieved 80-90% confluence. This product is subject to limited use licenses from The Broad Institute, ERS Genomics Limited and Sigma-Aldrich Co. LLC, and is developed with patented technology. For full details of the licenses and patents please refer to our **limited use license** and **patent pages**.

We will provide viable cells that proliferate on revival.

#### 製品の特性

Number of cells	1 x 10 <sup>6</sup> cells/vial, 1 mL	
Adherent /Suspension	Adherent	
Tissue	Skin	
Cell type	epithelial	
Disease	Epidermoid Carcinoma	
Gender	Female	
Mycoplasma free	Yes	
保存方法	Shipped on Dry Ice. Store in liquid nitrogen.	
バッファー	Constituents: 8.7% Dimethylsulfoxide, 2% Cellulose, methyl ether	

#### ターゲット情報

機能	Cytoskeletal protein involved in actin-membrane attachment at sites of cell adhesion to the extracellular matrix (focal adhesion).
配列類似性	Belongs to the paxillin family. Contains 4 LIM zinc-binding domains.
翻訳後修飾	Phosphorylated on tyrosine residues during integrin-mediated cell adhesion, embryonic development, fibroblast transformation and following stimulation of cells by mitogens.
細胞内局在	Cytoplasm > cytoskeleton. Cell junction > focal adhesion.

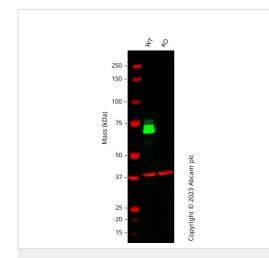
#### アプリケーション

The Abpromise guarantee	Abpromise保証は、次のテスト済みアプリケーションにおけるab261892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
WB		Use at an assay dependent concentration.
Next Generation Sequencing		Use at an assay dependent concentration.

GTAATGAGCACGTCCCTGGGCAGCAACCTTTCTGAACTCGACCGC [····• Wild CATTACTCGTGCAGGGACCCGTCGTTGGAAAGACTTGAGCTGGCG Type V M S T S L G S N L S E L D R 135 140 145 PXN CCDS44996.1 exon #4/11 GTAATGAGCACGTGCCCTGGGCAGCAACCTTTCTGAACTCGACCG [····••····]····•]····•]····•]····• Edited CATTACTCGTGCACGGGACCCGTCGTTGGAAAGACTTGAGCTGGC Clone V M S T C P G Q Q P F \* T R P 135 140 145

Next Generation Sequencing - Human PXN (Paxillin) knockout A-431 cell line (ab261892)



Western blot - Human PXN (Paxillin) knockout A-431 cell line (ab261892) 1 bp insertion after Thr135 of the WT protein

All lanes : Anti-Paxillin antibody [Y113] (<u>ab32084</u>) at 1/1000 dilution

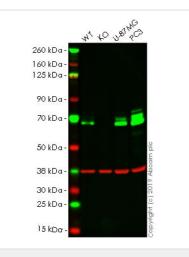
Lane 1 : Wild-type A431 cell lysate Lane 2 : PXN knockout A431 cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Observed band size: 70 kDa

Anti-PXN antibody [Y113] (ab32084) staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (ab8245) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab32084 was shown to bind specifically to PXN. A band was observed at 70 kDa in wild-type A431 cell lysates with no signal observed at this size in PXN knockout cell line ab261892 (knockout cell lysate ab261701). To generate this image, wild-type and PXN knockout A431 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween\$®\$ 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution



Western blot - Human PXN (Paxillin) knockout A-431 cell line (ab261892) All lanes : Anti-Paxillin antibody [E228] (<u>ab32115</u>) 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.

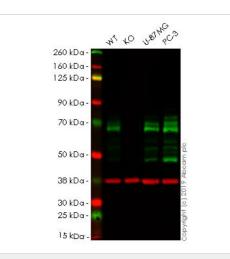
Performed under reducing conditions.

Observed band size: 65 kDa

Exposure time: 10 seconds

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

**ab32115** was shown to specifically react with PXN in wild-type A-431 cells as signal was lost in PXN knockout cell line ab261892 (knockout cell lysate **ab261701**). Wild-type and PXN knockout samples were subjected to SDS-PAGE. The membrane was blocked with 3% milk. Ab32115 and **ab8245** (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 IgG H&L (IRDye<sup>®</sup> 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 680RD) preabsorbed **ab216776** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Western blot - Human PXN (Paxillin) knockout A-431 cell line (ab261892) All lanes : Anti-Paxillin antibody [M107] (<u>ab23510</u>) at 1/1000 dilution

Lane 1 : Wild-type A-431 (Human epidermoid carcinoma cell line) whole cell lysate

Lane 2 : PXN knockout A-431 (Human epidermoid carcinoma cell line) whole cell lysate

Lane 3 : U-87 MG (Human glioblastoma-astrocytoma epithelial cell line) whole cell lysate

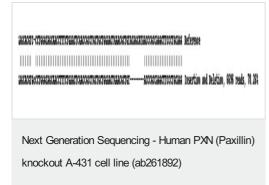
Lane 4 : PC3 (Human prostate adenocarcinoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Lanes 1 - 4: Merged signal (red and green). Green - <u>ab23510</u> observed at 65 kDa. Red - loading control, <u>ab181602</u>, observed at 37 kDa.

**ab23510** was shown to recognize PXN in wild-type A-431 cells as signal was lost at the expected MW in PXN knockout cell line ab261892 (knockout cell lysate **ab261701**). Additional cross-reactive bands were observed in the wild-type and knockout samples. Wild-type and PXN knockout samples were subjected to SDS-PAGE. Ab23510 and **ab181602** (Rabbit anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 800CW) preabsorbed **ab216772** and Goat anti-Rabbit IgG H&L (IRDye<sup>®</sup> 680RD) preabsorbed **ab216777** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



X = 7 bp deletion, 1 bp insertion

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