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	Recommended control: 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. Cryopreservation cell medium: Cell Freezing Medium-DMSO Serum free media, contains	
	8.7% DMSO in MEM supplemented with methyl cellulose.	
	Culture medium: DMEM (High Glucose) + 10% FBS	
	Initial handling guidelines: 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.	
	 Thaw the vial in 37°C water bath for approximately 1-2 minutes. 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. 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 	
	 haemocytometer or alternative cell counting method. Based on cell count, seed cells in an appropriate cell culture flask at a density of 2x10⁴ cells/cm². Seeding density is given as a guide only and should be scaled to align with individual lab schedules. 4. Incubate the culture at 37°C incubator with 5% CO₂. Cultures should be monitored daily. 	
	Subculture guidelines:	
	All seeding densities should be based on cell counts gained by established methods. A guide seeding density of 2x10 ⁴ cells/cm ² 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 ⁶ 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.

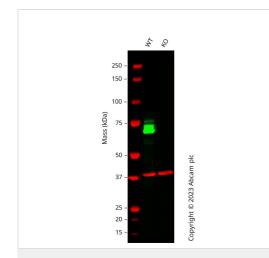
アプリケーション

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

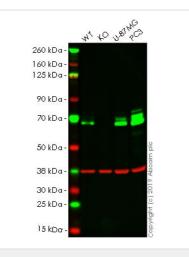
Lane 1 : Wild-type A431 cell lysate Lane 2 : PXN knockout A431 cell lysate

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.

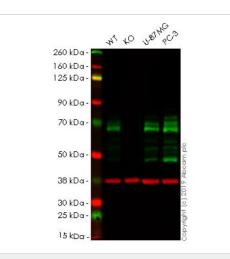
Performed under reducing conditions.

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[®] 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye[®] 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

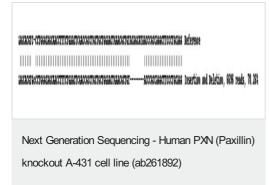
Lane 4 : PC3 (Human prostate adenocarcinoma cell line) whole cell lysate

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[®] 800CW) preabsorbed **ab216772** and Goat anti-Rabbit IgG H&L (IRDye[®] 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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