# abcam

# Product datasheet

# Human CXCL8 knockout PC-3 cell lysate ab275520

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**Product name** 

Human CXCL8 knockout PC-3 cell lysate

**Product overview** 

Knockout cell lysate achieved by CRISPR/Cas9.

**Treatments:** 

Human CXCL8 knockout PC3 cell lysate - Brefeldin A (5 µg/ml, 5h)

Human wild-type PC3 cell lysate - Brefeldin A (5 µg/ml, 5h)

Human CXCL8 knockout PC3 cell lysate - LPS (2  $\mu$ g/ml, 6h) and Brefeldin A (5  $\mu$ g/ml, 5h)

Human wild-type PC3 cell lysate - LPS (2 μg/ml, 6h) and Brefeldin A (5 μg/ml, 5h)

Parental Cell Line PC3

**Organism** Human

Mutation description Knockout achieved by using CRISPR/Cas9, Homozygous: 22% 11 bp deletion, 24% 7 bp

deletion, 54% 2 bp deletion in exon 2

Passage number <20

**Knockout validation** Next Generation Sequencing (NGS), Western Blot (WB)

Reconstitution notes

To use as WB control, resuspend the lyophilizate in 50 μL of LDS\* Sample Buffer to have a final

concentration of 2 mg/ml. For reducing conditions, we recommend a final concentration of 0.1 M

DTT.

\*Usage of SDS sample buffer is not recommended with these lyophilized lysates.

Notes

Lysate preparation: Our lysates are made using RIPA buffer to which we add a protease

inhibitor cocktail and phosphatase inhibitor cocktail (ratio: 300:100:10). *This means that the protein of interest is denatured.* If you require a native form of the protein please use the live cell version - found **here**. Please refer to our lysis protocol for further details on how our lysates are

prepared.

User storage instructions: Lyophilizate may be stored at 4°C. After reconstitution, store at -

20°C for short-term storage or -80°C for long-term storage.

Access thousands of knockout cell lysates, generated from commonly used cancer cell lines.

See here for more information on knockout cell lysates.

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of

products that contain European Authorisation list (Annex XIV) substances.

It is the responsibility of our customers to check the necessity of application of REACH

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Tested applications Suitable for: WB

#### **Properties**

**Storage instructions** Store at -80°C. Please refer to protocols.

Components	1 kit
ab277344 - Human CXCL8 knockout PC3 cell lysate - Brefeldin A treated	1 x 100µg
ab277343 - Human CXCL8 knockout PC3 cell lysate - LPS + Brefeldin A treated	1 x 100µg
ab277346 - Human wild-type PC3 cell lysate - Brefeldin A treated	1 x 100µg
ab277345 - Human wild-type PC3 cell lysate - LPS + Brefeldin A treated	1 x 100µg

Cell type epithelial

**Disease** Adenocarcinoma

**Gender** Male

#### **Target**

Function	IL-8 is a chemotactic factor that attracts neutrophils, basophils, and T-cells, but not monocytes. It is
	also involved in neutrophil activation. It is released from several cell types in response to an

inflammatory stimulus. IL-8(6-77) has a 5-10-fold higher activity on neutrophil activation, IL-8(5-77) has increased activity on neutrophil activation and IL-8(7-77) has a higher affinity to receptors

CXCR1 and CXCR2 as compared to IL-8(1-77), respectively.

**Sequence similarities**Belongs to the intercrine alpha (chemokine CxC) family.

Post-translational modifications

Several N-terminal processed forms are produced by proteolytic cleavage after secretion from at

least peripheral blood monocytes, leukcocytes and endothelial cells. In general, IL-8(1-77) is

referred to as interleukin-8.  $\mathbb{L}$ -8(6-77) is the most promiment form.

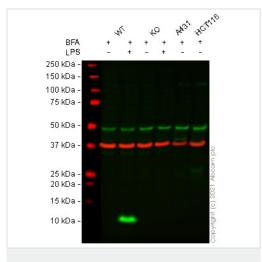
Cellular localization Secreted.

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab275520 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		Use at an assay dependent concentration.



Western blot - Human CXCL8 knockout PC3 cell lysate (ab275520)

**Lane 1:** Wild-type PC-3 Brefeldin A (<u>ab120299</u>)-treated (5  $\mu$ g/ml, 5 h) cell lysate 30  $\mu$ g

**Lane 2:** Wild-type PC-3 LPS-treated (2  $\mu$ g/ml, 6 h) with Brefeldin A (ab120299) (5  $\mu$ g/ml, 5 h) cell lysate 30  $\mu$ g

**Lane 3:** CXCL8 knockout PC-3 Brefeldin A (<u>ab120299</u>)-treated (5 µg/ml, 5 h) cell lysate 30 µg

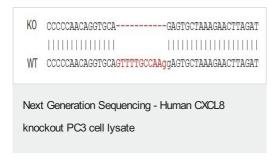
**Lane 4:** CXCL8 knockout PC-3 LPS-treated (2  $\mu$ g/ml, 6 h) with Brefeldin A (ab120299) (5  $\mu$ g/ml, 5 h) cell lysate 30  $\mu$ g

Lane 5: A431 cell lysate 30 µg

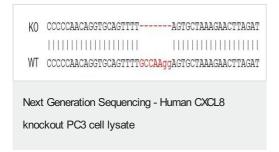
Lane 6: HCT116 cell lysate 30 µg

**Lanes 1 - 6:** Merged signal (red and green). Green - <u>ab235584</u> observed at 10 kDa. Red - loading control <u>ab8245</u> (Mouse anti-GAPDH antibody [6C5]) observed at 37kDa.

ab235584 was shown to react with IL-8 in wild-type PC-3 cells in Western blot with loss of signal observed in CXCL8 knockout cell line ab273743 (knockout cell lysate ab275520). Wild-type PC-3 and CXCL8 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with ab235584 and ab8245 (Mouse anti-GAPDH antibody [6C5]) overnight at 4 °C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated 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 in 20000 dilution for 1 h at room temperature before imaging.



Allele-1: 11bp deletion in exon 2.



Allele-2: 7bp deletion in exon 2.

KO CCCCCAACAGGTGCAGTTTTGCCAA--AGTGCTAAAGAACTTAGAT

WT CCCCCCAACAGGTGCAGTTTTGCCAAGGAGTGCTAAAGAACTTAGAT

Next Generation Sequencing - Human CXCL8

knockout PC3 cell lysate

Allele-3: 2bp deletion in exon 2.

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

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