## abcam

#### Product datasheet

# Human CXCL10 (IP10) knockout A549 cell lysate ab256886

### 2 Images

#### Overview

**Product name** 

Human CXCL10 (IP10) knockout A549 cell lysate

**Product overview** 

Knockout cell lysate achieved by CRISPR/Cas9.

Treatments:

Human CXCL10 knockout A549 cell lysate - Brefeldin A (5 µg/ml, 6h)

Human wild-type A549 cell lysate - Brefeldin A (5 µg/ml, 6h)

Human CXCL10 knockout A549 cell lysate - IFN-y (100 ng/ml, 32h), TNF-a (10 ng/ml, 32h) and

Brefeldin A (5 µg/ml, during the last 6h of IFN-y/TNF-a treatment)

Human wild-type A549 cell lysate - IFN-y (100 ng/ml, 32h), TNF-a (10 ng/ml, 32h) and Brefeldin A

(5  $\mu$ g/ml, during the last 6h of IFN-y/TNF-a treatment)

Parental Cell Line A549
Organism Human

Mutation description Knockout achieved by using CRISPR/Cas9, 1 bp insertion in exon2.

Passage number <20

**Knockout validation** Sanger Sequencing, 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 -

 $20^{\circ}\text{C}$  for short-term storage or -80  $^{\circ}\text{C}$  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

1

. . .

products that contain European Authorisation list (Annex XIV) substances. It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

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**.

#### **Properties**

Storage instructions

Store at -80°C. Please refer to protocols.

Components	1 kit
ab262033 - Human CXCL10 knockout A549 cell lysate - Brefeldin A treated	1 x 100µg
ab277646 - Human CXCL10 knockout A549 cell lysate - IFN-y, TNF-alpha + Brefeldin A treated	1 x 100µg
ab277645 - Human wild-type A549 cell lysate - Brefeldin A treated	1 x 100µg
ab277647 - Human wild-type A549 cell lysate - IFN-y, TNF-alpha + Brefeldin A treated	1 x 100µg

Cell type epithelial

Disease Carcinoma

**STR Analysis** Amelogenin X,Y D5S818: 11 D13S317: 11 D7S820: 8, 11 D16S539: 11, 12 vWA: 14 TH01:

8,9.3 TPOX: 8,11 CSF1PO: 10, 12

#### **Target**

**Function** Chemotactic for monocytes and T-lymphocytes. Binds to CXCR3.

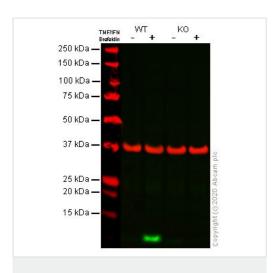
**Sequence similarities** Belongs to the intercrine alpha (chemokine CxC) family.

Post-translational modifications

CXCL10(1-73) is produced by proteolytic cleavage after secretion from keratinocytes.

Cellular localization Secreted.

#### **Images**



Western blot - Human CXCL10 (IP10) knockout A549 cell lysate (ab256886)

**Lane 1:** Wild-type A549 Brefeldin A (<u>ab120299</u>)-treated (5ug/ml, 6h) cell lysate 30 ug

 $\begin{tabular}{ll} \textbf{Lane 2:} Wild-type A549 IFN-y ($\underline{ab259377}$) (100 ng/ml, 32 h) and \\ TNF-alpha ($\underline{ab259410}$) (10 ng/ml) for 32 hours, and Brefeldin A ($\underline{ab120299}$)-treated (5ug/ml for the last 6h) cell lysate 30 ug \end{tabular}$ 

**Lane 3:** IP10 knockout A549 Brefeldin A ( $\underline{ab120299}$ )-treated (5ug/ml, 6h) cell lysate 30 ug

**Lane 4:** IP10 knockout A549 IFN-y (<u>ab259377</u>) (100 ng/ml, 32 h) and TNF-alpha (<u>ab259410</u>) (10 ng/ml) for 32 hours, and Brefeldin A (<u>ab120299</u>)-treated (5ug/ml for the last 6h) cell lysate 30 ug

**Lanes 1 - 4:** Merged signal (red and green). Green - <u>ab137018</u> observed at 11 kDa. Red - loading control, <u>ab8245</u> (Mouse anti-GAPDH antibody [6C5]) observed at 37kDa.

ab137018 was shown to react with IP10 in wild-type A549 cells in western blot with loss of signal observed in IP10 knockout cell line ab266969 (IP10 knockout cell lysate ab256886). A549 wild-type and IP10 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with ab137018 and ab8245 (Mouse anti-GAPDH antibody [6C5]) overnight at 4°C at a 1 in 500 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® 800CW) preabsorbed (ab216772) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

Mut TGCATCAGCATTAGTAATCAACCTGTTAATTCCAAGGTCTTTAGAAAAACTTGAAATTAT

WT TGCATCAGCATTAGTAATCAACCTGTTAAT CCAAGGTCTTTAGAAAAACTTGAAATTAT

Sanger Sequencing - Human CXCL10 knockout

A549 cell lysate (ab256886)

Homozygous: 1 bp insertion in exon2

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 <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

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