

Product datasheet

Human USP22 knockout HeLa cell lysate ab257789

3 Images

Overview

Product name	Human USP22 knockout HeLa cell lysate
Product overview	Knockout cell lysate achieved by CRISPR/Cas9.
Parental Cell Line	HeLa
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, Homozygous: 1 bp deletion in exon 1.
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. <i>*Usage of SDS sample buffer is not recommended with these lyophilized lysates.</i>

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.](#)

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Tested applications

Suitable for: Sanger Sequencing, WB

Properties

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

Components	1 kit
ab260351 - Human USP22 knockout HeLa cell lysate	1 x 100µg
ab255552 - Human wild-type HeLa cell lysate	1 x 100µg

Cell type epithelial
Disease Adenocarcinoma
Gender Female
STR Analysis Amelogenin X D5S818: 11, 12 D13S317: 12, 13.3 D7S820: 8, 12 D16S539: 9, 10 vWA: 16, 18 TH01: 7 TPOX: 8, 12 CSF1PO: 9, 10

Target

Function Histone deubiquitinating component of the transcription regulatory histone acetylation (HAT) complex SAGA. Catalyzes the deubiquitination of both histones H2A and H2B, thereby acting as a coactivator. Recruited to specific gene promoters by activators such as MYC, where it is required for transcription. Required for nuclear receptor-mediated transactivation and cell cycle progression.

Tissue specificity Moderately expressed in various tissues including heart and skeletal muscle, and weakly expressed in lung and liver.

Sequence similarities Belongs to the peptidase C19 family. UBP8 subfamily. Contains 1 UBP-type zinc finger.

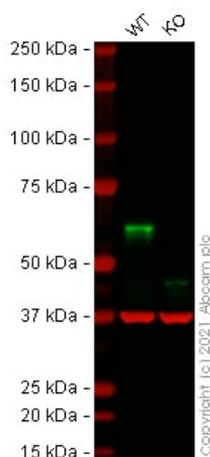
Cellular localization Nucleus.

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab257789 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
Sanger Sequencing		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 60 kDa.

Images

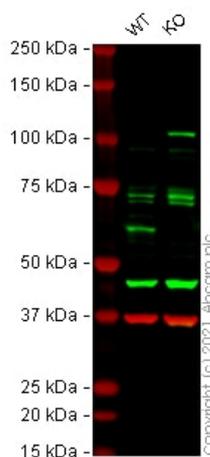


Western blot - Human USP22 knockout HeLa cell lysate (ab257789)

Lane 1: Wild-type HeLa cell lysate 20 μ g

Lane 2: USP22 knockout HeLa cell lysate 20 μ g

False colour image of Western blot: Anti-USP22 antibody [EPR18945] staining at 1/2000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] ([ab8245](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, [ab195289](#) was shown to bind specifically to USP22. A band was observed at 59 kDa in wild-type HeLa cell lysates with no signal observed at this size in usp22 knockout cell line [ab264888](#) (knockout cell lysate ab257789). To generate this image, wild-type and usp22 knockout HeLa cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution 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 (IRDye® 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ([ab216776](#)) at 1/20000 dilution.



Western blot - Human USP22 knockout HeLa cell lysate (ab257789)

Lane 1: Wild-type HeLa cell lysate 20 μ g

Lane 2: USP22 knockout HeLa cell lysate 20 μ g

False colour image of Western blot: Anti-USP22 antibody [EPR4352(2)] 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, [ab109435](#) was shown to bind specifically to USP22. A band was observed at 59 kDa in wild-type HeLa cell lysates with no signal observed at this size in usp22 knockout cell line [ab264888](#) (knockout cell lysate ab257789). To generate this image, wild-type and usp22 knockout HeLa cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution 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 (IRDye® 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ([ab216776](#)) at 1/20000 dilution.

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Mut  CACCTTGAAGCTGCCAGGTGCAGCAGCC- GGC GGC GCT ACCGCCAGCTCGGCCTCAT
      |||
WT   CACCTTGAAGCTGCCAGGTGCAGCAGCCCGGC GGC GCT ACCGCCAGCTCGGCCTCAT
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Homozygous: 1 bp deletion in exon 1

Sanger Sequencing - Human USP22 knockout HeLa cell lysate (ab257789)

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