

### Human ASS1 knockout HeLa cell lysate ab257143

#### 4 图像

#### 概述

产品名称	人ASS1 knockout HeLa cell裂解物
产品概述	Knockout cell lysate achieved by CRISPR/Cas9.
Parental Cell Line	HeLa
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, 1 bp insertion in exon 3 and Insertion of the selection cassette in exon 3.
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>

#### 说明

**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 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](#).

#### 经测试应用

适用于: WB

性能

存放说明 Store at -80°C. Please refer to protocols.

组件	1 kit
ab260139 - Human ASS1 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

靶标

通路	Amino-acid biosynthesis; L-arginine biosynthesis; L-arginine from L-ornithine and carbamoyl phosphate: step 2/3. Nitrogen metabolism; urea cycle; (N(omega)-L-arginino)succinate from L-aspartate and L-citrulline: step 1/1.
疾病相关	Defects in ASS1 are the cause of citrullinemia type 1 (CTLN1) [MIM:215700]. Citrullinemia belongs to the urea cycle disorders. It is an autosomal recessive disease characterized primarily by elevated serum and urine citrulline levels. Ammonia intoxication is another manifestation. CTLN1 usually manifests in the first few days of life. Affected infants appear normal at birth, but as ammonia builds up in the body they present symptoms such as lethargy, poor feeding, vomiting, seizures and loss of consciousness. Less commonly, a milder CTLN1 form can develop later in childhood or adulthood.
序列相似性	Belongs to the argininosuccinate synthase family. Type 1 subfamily.

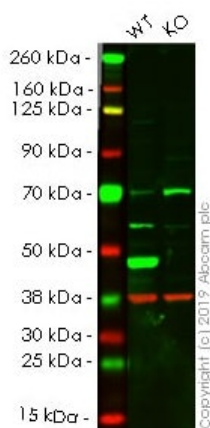
应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab257143于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		Use at an assay dependent concentration.

图片



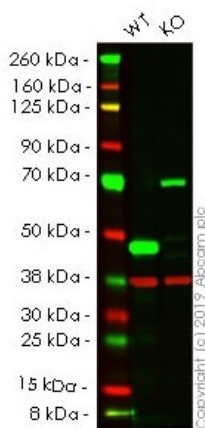
Western blot - Human ASS1 knockout HeLa cell lysate (ab257143)

**Lane 1:** Wild-type HeLa cell lysate (20µg)

**Lane 2:** ASS1 knockout HeLa cell lysate (20µg)

**Lanes 1- 2:** Merged signal (red and green). Green - **ab170952** observed at 47 kDa. Red - loading control **ab8245** observed at 37 kDa.

**ab170952** Anti-ASS1 antibody [EPR12398] was shown to specifically react with ASS1 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line **ab264989** (knockout cell lysate ab257143) was used. Wild-type and ASS1 knockout samples were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. **ab170952** and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Human ASS1 knockout HeLa cell lysate (ab257143)

**Lane 1:** Wild-type HeLa cell lysate (20µg)

**Lane 2:** ASS1 knockout HeLa cell lysate (20µg)

**Lanes 1- 2:** Merged signal (red and green). Green - **ab170900** observed at 47 kDa. Red - loading control **ab8245** observed at 37 kDa.

**ab170900** Anti-ASS1 antibody [EPR12399(B)] - C-terminal was shown to specifically react with ASS1 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line **ab264989** (knockout cell lysate ab257143) was used. Wild-type and ASS1 knockout samples were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. **ab170900** and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary

antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

Mut	TCCCGCCAGACGCTATGTCCAGCAAAGGCTTCCGTGGTCTGGCCTACAGTGGCGGCCTG
WT	TCCCGCCAGACGCTATGTCCAGCAAAGGCTCCGTGGTCTGGCCTACAGTGGCGGCCTG

Sanger Sequencing - Human ASS1 knockout HeLa cell lysate (ab257143)

Allele-1: 1 bp insertion in exon 3

Mut	CGCTATGTCCAGCAAAGGCT*****Insertion*****CCGTGGTCTGGCCTACAGT
WT	CGCTATGTCCAGCAAAGGCTCCGTGGTCTGGCCTACAGT

Sanger Sequencing - Human ASS1 knockout HeLa cell lysate (ab257143)

Allele-2: Insertion of the selection cassette in exon 3

**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 <https://www.abcam.cn/abpromise> or contact our technical team.

### Terms and conditions

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