

Product datasheet

Human HINT1 knockout HeLa cell line ab265776

2 Images

Overview

<b>Product name</b>	Human HINT1 knockout HeLa cell line
<b>Parental Cell Line</b>	HeLa
<b>Organism</b>	Human
<b>Mutation description</b>	Knockout achieved by using CRISPR/Cas9, Homozygous: 1 bp deletion in exon 1
<b>Passage number</b>	<20
<b>Knockout validation</b>	Sanger Sequencing, Western Blot (WB)
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Biosafety level</b>	2
<b>General notes</b>	<p><b>Recommended control:</b> Human wild-type HeLa cell line (<a href="#">ab255928</a>). 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.</p> <p><b>Cryopreservation cell medium:</b> Cell Freezing Medium-DMSO Serum free media, contains 8.7% DMSO in MEM supplemented with methyl cellulose.</p> <p><b>Culture medium:</b> DMEM (High Glucose) + 10% FBS</p> <p><b>Initial handling guidelines:</b> 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.</p> <ol style="list-style-type: none"> <li>1. Thaw the vial in 37°C water bath approximately 1-2 minutes.</li> <li>2. Transfer the cell suspension (0.8 ml) to a 15 ml/50 ml conical sterile polypropylene centrifuge tube containing 8.4 ml pre-warmed <b>culture medium</b>, wash vial with an additional 0.8 ml <b>culture medium</b> (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.</li> <li>3. Resuspend the cell pellet in 5 ml pre-warmed <b>culture medium</b> and count using a haemocytometer (<a href="#">Click here to view haemocytometer protocol</a>) or alternative cell counting method. Based on cell count, seed cells in an appropriate cell culture flask at a density of 2x10<sup>4</sup> cells/cm<sup>2</sup>. This should allow for confluency within 48 hours. Seeding density is given as a guide only and should be scaled to align with individual lab schedules.</li> <li>4. Incubate the culture at 37°C incubator with 5% CO<sub>2</sub>. Cultures should be monitored daily.</li> </ol> <p><b>Subculture guidelines:</b></p> <p>All seeding densities should be based on cell counts gained by established methods. A guide seeding density of 2x10<sup>4</sup> cells/cm<sup>2</sup> is recommended for confluency (80-90% confluence) within 48 hours.</p>

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.

[Click here to view the Mammalian cell tissue culture protocol](#)

This product is subject to limited use licenses from The Broad Institute and ERS Genomics Limited, and is developed with patented technology. For full details of the limited use licenses and relevant patents please refer to our [limited use license](#) and [patent pages](#).

## Properties

---

<b>Number of cells</b>	1 x 10 <sup>6</sup> cells/vial, 1 mL
<b>Viability</b>	~90%
<b>Adherent /Suspension</b>	Adherent
<b>Tissue</b>	Cervix
<b>Cell type</b>	epithelial
<b>Disease</b>	Adenocarcinoma
<b>Gender</b>	Female
<b>STR Analysis</b>	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
<b>Mycoplasma free</b>	Yes
<b>Storage instructions</b>	Shipped on Dry Ice. Store in liquid nitrogen.
<b>Storage buffer</b>	Constituents: 8.7% DMSO, 2% Cellulose, methyl ether

## Target

---

<b>Function</b>	Hydrolyzes adenosine 5'-monophosphoramidate substrates such as AMP-morpholidate, AMP-N-alanine methyl ester, AMP-alpha-acetyl lysine methyl ester and AMP-NH <sub>2</sub> .
<b>Tissue specificity</b>	Widely expressed.
<b>Sequence similarities</b>	Belongs to the HINT family. Contains 1 HIT domain.
<b>Domain</b>	The histidine triad, also called HIT motif, forms part of the binding loop for the alpha-phosphate of purine mononucleotide.
<b>Cellular localization</b>	Cytoplasm. Nucleus. Interaction with CDK7 leads to a more nuclear localization.

---

## Applications

---

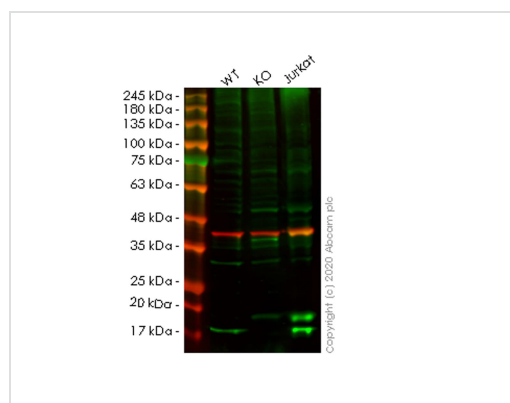
Our [Abpromise guarantee](#) covers the use of **ab265776** in the following tested applications.

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. Predicted molecular weight: 14 kDa.

---

## Images



Western blot - Human HINT1 knockout HeLa cell line (ab265776)

**All lanes :** Anti-HINT1 antibody [EPR5108] ([ab124912](#)) at 1/500 dilution

**Lane 1 :** Wild-type HeLa cell lysate

**Lane 2 :** HINT1 knockout HeLa cell lysate

**Lane 3 :** Jurkat cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes :** Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) at 1/10000 dilution

**Predicted band size:** 14 kDa

**Observed band size:** 17 kDa

[why is the actual band size different from the predicted?](#)

**Lanes 1-3:** Merged signal (red and green). Green - [ab124912](#) observed at 17 kDa. Red - loading control [ab8245](#) observed at 36 kDa.

[ab124912](#) Anti-HINT1 antibody [EPR5108] was shown to specifically react with HINT1 in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab265776 (knockout cell lysate [ab257465](#)) was used. Wild-type and HINT1 knockout samples were subjected to SDS-PAGE. [ab124912](#) and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated at room temperature for 2.5 hours at 1 in 500 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  GGAGAGAGGCCGAGATGGCAGATGAGATT  CCAAGGCTCAGGTCGCTCGGCCCTGGTGGCG
WT   GGAGAGAGGCCGAGATGGCAGATGAGATT  GCCAAGGCTCAGGTCGCTCGGCCCTGGTGGCG
```

Sanger Sequencing - Human HINT1 knockout HeLa cell line (ab265776)

Homozygous: 1 bp deletion in exon 1.

**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.com/abpromise> or contact our technical team.

### **Terms and conditions**

---

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