

Product datasheet

Human EXOC2 knockout HeLa cell line ab265839

3 Images

Overview

<b>Product name</b>	Human EXOC2 knockout HeLa cell line
<b>Parental Cell Line</b>	HeLa
<b>Organism</b>	Human
<b>Mutation description</b>	Knockout achieved by using CRISPR/Cas9, 1 bp insertion in exon 3 and 2 bp insertion in exon 3
<b>Passage number</b>	<20
<b>Knockout validation</b>	Sanger Sequencing
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Biosafety level</b>	2
<b>General notes</b>	<p>Western blot data indicates that the CRISPR gene edit may have resulted in a truncation of the protein of interest. Please see data images.</p> <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 for 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 culture medium, wash vial with an additional 0.8 mL culture medium (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 culture medium and count using a haemocytometer or alternative cell counting method. Based on cell count, seed cells in an appropriate cell culture flask at a density of <math>2 \times 10^4</math> cells/cm<sup>2</sup>. 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 <math>2 \times 10^4</math> cells/cm<sup>2</sup> is recommended.</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.

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## Properties

<b>Number of cells</b>	1 x 10 <sup>6</sup> cells/vial, 1 mL
<b>Viability</b>	~80%
<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% Dimethylsulfoxide, 2% Cellulose, methyl ether

## Target

<b>Function</b>	Component of the exocyst complex involved in the docking of exocytic vesicles with fusion sites on the plasma membrane.
<b>Tissue specificity</b>	Widely expressed with highest levels in brain and placenta.
<b>Sequence similarities</b>	Belongs to the SEC5 family. Contains 1 IPT/TIG domain.
<b>Domain</b>	Interacts with RALA through the TIG domain.

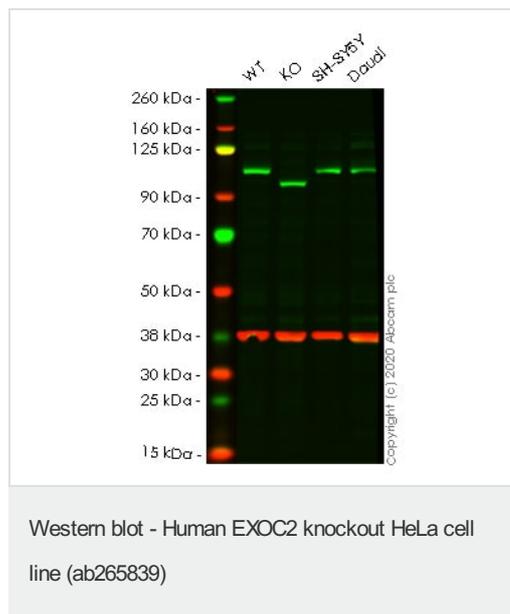
## Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab265839 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
<b>WB</b>		Use at an assay dependent concentration. Predicted molecular weight: 104 kDa. Western blot data indicates that the CRISPR gene edit may have resulted in a truncation of the protein of interest. Please see data images.

## Images



**All lanes** : Anti-EXOC2 antibody [EPR9420] ([ab140620](#)) at 1000  $\mu$ g

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

**Lane 2** : EXOC2 knockout HeLa cell lysate

**Lane 3** : SH-SY5Y cell lysate

**Lane 4** : Daudi cell lysate

Lysates/proteins at 20  $\mu$ g per lane.

Performed under reducing conditions.

**Predicted band size:** 104 kDa

**Observed band size:** 104 kDa

**Lanes 1- 4:** Merged signal (red and green). Green - [ab140620](#) observed at 104 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) observed at 37 kDa.

[ab140620](#) was shown to react with EXOC2 in wild-type HeLa cells in western blot. The band observed in knockout cell line [ab265839](#) (knockout cell lysate [ab257944](#)) lane below 104kDa may represent truncated forms and cleaved fragments. This has not been investigated further. Wild-type HeLa and EXOC2 knockout HeLa cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. [ab140620](#) and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated overnight at 4°C at a 1 in 1000 dilution and a 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	GCTTGACCATTGTGGACATAATTGCCTCCCTTGACGGCAGAATGGATGTCTGCAAGTAA
WT	GCTTGACCATTGTGGACATAATTGCCTCC TGACGGCAGAATGGATGTCTGCAAGTAA

Sanger Sequencing - Human EXOC2 knockout HeLa cell line (ab265839)

Allele-2: 2 bp insertion in exon 3.

Mut	GCTTGACCATTGTGGACATAATTGCCTCCCTTGACGGCAGAATGGATGTCTGCAAGTAAA
WT	GCTTGACCATTGTGGACATAATTGCCTCC TGACGGCAGAATGGATGTCTGCAAGTAAA

Sanger Sequencing - Human EXOC2 knockout HeLa cell line (ab265839)

Allele-1: 1 bp insertion in exon 3.

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

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