

## Product datasheet

# Human TMUB1 knockout HeLa cell lysate ab258237

3 Images

### Overview

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**Product name** Human TMUB1 knockout HeLa cell lysate

**Product overview**

Knockout cell lysate achieved by CRISPR/Cas9.

**Knockout profile:** Only the long form of the protein (IHOPS, 27 kDa) has been knocked-out from the parental cell line. The band observed in the KO lysate at 21 kDa is likely to represent a short form of the protein (sHOPS) (doi: 10.4161/cc.27054). We have not investigated the function of the remaining form of the protein.

**Parental Cell Line**

HeLa

**Organism**

Human

**Mutation description**

Knockout achieved by using CRISPR/Cas9, 1 bp deletion in exon2 and 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°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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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](#).

**Tested applications**                      **Suitable for:** WB, Sanger Sequencing

## Properties

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

Components	1 kit
ab261184 - Human TMUB1 knockout HeLa cell lysate	1 x 100µg
ab255929 - 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 WWA: 16, 18 TH01: 7 TPOX: 8,12 CSF1PO: 9, 10

## Target

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**Function**                                      May contribute to the regulation of translation during cell-cycle progression. May contribute to the regulation of cell proliferation.  
**Sequence similarities**                      Contains 1 ubiquitin-like domain.  
**Cellular localization**                      Membrane. Cytoplasm. Nucleus. Predominantly nuclear during growth arrest (By similarity). Actively exported from the nucleus in dividing cells.

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## Applications

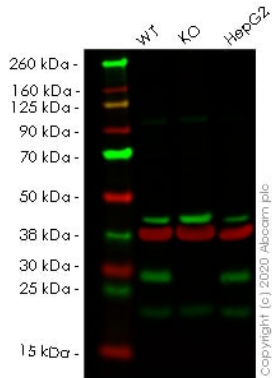
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**The Abpromise guarantee**                Our [Abpromise guarantee](#) covers the use of ab258237 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
<b>WB</b>		Use at an assay dependent concentration. Predicted molecular weight: 26 kDa.
<b>Sanger Sequencing</b>		Use at an assay dependent concentration.

## Images

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Western blot - Human TMUB1 knockout HeLa cell lysate (ab258237)

**Lane 1:** Wild-type HeLa (Human epithelial cell line from cervix adenocarcinoma) cell lysate (20µg)

**Lane 2:** TMUB1 knockout HeLa (Human epithelial cell line from cervix adenocarcinoma) cell lysate (20µg)

**Lane 3:** HepG2 (Human liver hepatocellular carcinoma cell line) cell lysate (20µg)

**Lanes 1- 3:** Merged signal (red and green). Green - **ab180586** observed at 27 kDa. Red - loading control **ab8245** observed at 37 kDa.

**ab180586** Recombinant Anti-TMUB1 antibody [EPR14066] was shown to specifically react with TMUB1 in wild-type HeLa (Human epithelial cell line from cervix adenocarcinoma) cells in western blot. Loss of signal was observed when knockout cell line **ab265852** (knockout cell lysate ab258237) was used. Wild-type and TMUB1 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. **ab180586** and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 10000 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  TGAAGGGGTGGGTGATGAGGTGACCGTCCTTTT-TCGGTGCTTGCCTGCCTTCTGGTGCT
      |||
WT   TGAAGGGGTGGGTGATGAGGTGACCGTCCTTTTCTCGGTGCTTGCCTGCCTTCTGGTGCT
  
```

Sanger Sequencing - Human TMUB1 knockout HeLa cell lysate (ab258237)

Allele-1: 1 bp deletion in exon2

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Mut  TGAAGGGGTGGGTGATGAGGTGACCGTCCTTTTCTCGGTGCTTGCCTGCCTTCTGGTGC
      |||
WT   TGAAGGGGTGGGTGATGAGGTGACCGTCCTTTT CTCGGTGCTTGCCTGCCTTCTGGTGC
  
```

Sanger Sequencing - Human TMUB1 knockout HeLa cell lysate (ab258237)

Allele-2: 1 bp insertion in exon2

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