

# Human TXNL1 knockout HEK-293T cell line ab266413

3 Images

### Overview

|                             |   |
|-----------------------------|---|
| <b>Product name</b>         | Human TXNL1 knockout HEK-293T cell line   |
| <b>Parental Cell Line</b>   | HEK293T   |
| <b>Organism</b>             | Human   |
| <b>Mutation description</b> | Knockout achieved by using CRISPR/Cas9, Homozygous: 11 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 HEK293T cell line (<a href="#">ab255449</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> <p>A partial media change 24 hours prior to subculture may be helpful to encourage growth, if required.</p> |

Cells should be passaged when they have achieved 80-90% confluence.

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We will provide viable cells that proliferate on revival.

## Properties

|                             |  |
|-----------------------------|--|
| <b>Number of cells</b>      | 1 x 10 <sup>6</sup> cells/vial, 1 mL   |
| <b>Adherent /Suspension</b> | Adherent   |
| <b>Tissue</b>               | Kidney   |
| <b>Cell type</b>            | epithelial   |
| <b>STR Analysis</b>         | Amelogenin X D5S818: 8, 9 D13S317: 12, 14 D7S820: 11 D16S539: 9, 13 vWA: 16, 19 TH01: 7, 9.3 TPOX: 11 CSF1PO: 11, 12 |
| <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

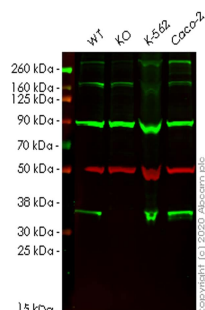
|                              |   |
|------------------------------|---|
| <b>Tissue specificity</b>    | Ubiquitous.   |
| <b>Sequence similarities</b> | Contains 1 PITH domain.<br>Contains 1 thioredoxin domain. |
| <b>Cellular localization</b> | Cytoplasm.  |

## Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab266413 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: 32 kDa. |

## Images



Western blot - Human TXNL1 knockout HEK293T cell line (ab266413)

**All lanes :** Anti-TXNL1 antibody [EPR16061(B)] - N-terminal ([ab188328](#)) at 1/1000 dilution

**Lane 1 :** Wild-type HEK293T cell lysate

**Lane 2 :** TXNL1 knockout HEK293T cell lysate

**Lane 3 :** K-562 cell lysate

**Lane 4 :** Caco-2 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:** 32 kDa

**Observed band size:** 32 kDa

**Lanes 1-4:** Merged signal (red and green). Green - [ab188328](#) observed at 32 kDa. Red - loading control [ab7291](#) observed at 50 kDa.

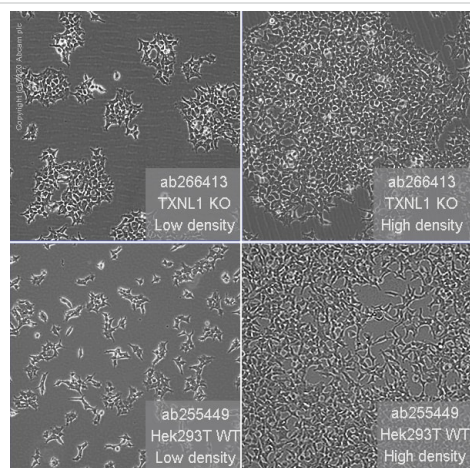
[ab188328](#) Anti-TXNL1 antibody [EPR16061(B)] - N-terminal was shown to specifically react with TXNL1 in wild-type HEK293T cells. Loss of signal was observed when knockout cell line ab266413 (knockout cell lysate [ab258258](#)) was used. Wild-type and TXNL1 knockout samples were subjected to SDS-PAGE. [ab188328](#) and Anti-alpha Tubulin antibody [DM1A] - Loading Control ([ab7291](#)) 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 | GCCACCTGCCGGGCTCTGTGAGGATGG-----CCCGTCGGGAGCGACCCGG    |
|     |  |
| WT  | GCCACCTGCCGGGCTCTGTGAGGATGGGGGGTGAAGCCGTCGGGAGCGACCCGG |

Homozygous: 11 bp deletion in exon 1

Sanger Sequencing - Human TXNL1 knockout

HEK293T cell line (ab266413)



Cell Culture - Human TXNL1 knockout HEK293T cell

line (ab266413)

Representative images of TXNL1 knockout HEK293T cells, low and high confluency examples (top left and right respectively) and wild-type HEK293T cells, low and high confluency (bottom left and right respectively) showing typical adherent, epithelial-like morphology. Images were captured at 10X magnification using an EVOS M5000 microscope.

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