

## Product datasheet

# Human POU4F2 (BRN3B) knockout HEK-293T cell line ab266542

[3 Images](#)

### Overview

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<b>Product name</b>	Human POU4F2 (BRN3B) 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, 11 bp deletion in exon 2 and 1 bp insertion in exon 2
<b>Passage number</b>	<20
<b>Knockout validation</b>	Sanger Sequencing
<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</p>

required.

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

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<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>Antibiotic resistance</b>	Puromycin 1.00µg/ml
<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

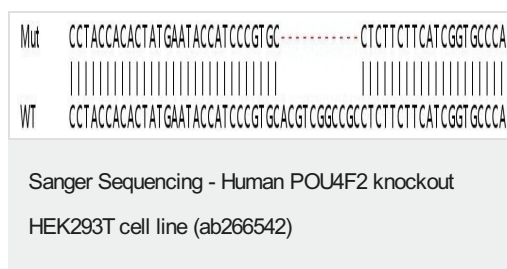
## Target

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<b>Function</b>	Transcription factor. May play a role in determining or maintaining the identities of a small subset of visual system neurons.
<b>Tissue specificity</b>	Brain. Seems to be specific to the retina.
<b>Sequence similarities</b>	Belongs to the POU transcription factor family. Class-4 subfamily. Contains 1 homeobox DNA-binding domain. Contains 1 POU-specific domain.
<b>Cellular localization</b>	Nucleus speckle.

## Images

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Allele-1: 11 bp deletion in exon2

Mut CCTACCACACTATGAATACCATCCCGTGCACGTGGGCGCCTCTTCTTCATCGGTGCC  
 |||  
 WT CCTACCACACTATGAATACCATCCCGTGC ACGTGGGCGCCTCTTCTTCATCGGTGCC

Sanger Sequencing - Human POU4F2 knockout  
 HEK293T cell line (ab266542)

Allele-2: 1 bp insertion in exon 2.

Cell Culture - Human POU4F2 (BRN3B) knockout  
 HEK293T cell line (ab266542)

Representative images of POU4F2 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 a EVOS XL Core microscope.

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