

Human DAZAP1 knockout HEK-293T cell line ab266469

4 Images

Overview

Product name	Human DAZAP1 knockout HEK-293T cell line
Parental Cell Line	HEK293T
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, 40 bp deletion in exon 6 and Insertion of the selection cassette in exon 6
Passage number	<20
Knockout validation	Sanger Sequencing
Tested applications	Suitable for: WB
Biosafety level	2
General notes	Western blot data indicates that the CRISPR gene edit may have resulted in a truncation of the protein of interest. Please see data images.

Recommended control: Human wild-type HEK293T cell line ([ab255449](#)). 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.

Cryopreservation cell medium: Cell Freezing Medium-DMSO Serum free media, contains 8.7% DMSO in MEM supplemented with methyl cellulose.

Culture medium: DMEM (High Glucose) + 10% FBS

Initial handling guidelines: 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.

1. Thaw the vial in 37°C water bath for approximately 1-2 minutes.
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.
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 2×10^4 cells/cm². Seeding density is given as a guide only and should be scaled to align with individual lab schedules.
4. Incubate the culture at 37°C incubator with 5% CO₂. Cultures should be monitored daily.

Subculture guidelines:

All seeding densities should be based on cell counts gained by established methods.

A guide seeding density of 2×10^4 cells/cm² is recommended.

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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We will provide viable cells that proliferate on revival.

Properties

Number of cells	1 x 10 ⁶ cells/vial, 1 mL
Adherent /Suspension	Adherent
Tissue	Kidney
Cell type	epithelial
STR Analysis	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
Mycoplasma free	Yes
Storage instructions	Shipped on Dry Ice. Store in liquid nitrogen.
Storage buffer	Constituents: 8.7% Dimethylsulfoxide, 2% Cellulose, methyl ether

Target

Function	RNA-binding protein, which may be required during spermatogenesis.
Tissue specificity	Mainly expressed in testis. Expressed to a lower level in thymus. Weakly or not expressed in heart, liver, brain, placenta, lung, skeletal muscle, kidney and pancreas.
Sequence similarities	Contains 2 RRM (RNA recognition motif) domains.
Post-translational modifications	Phosphorylated upon DNA damage, probably by ATM or ATR.
Cellular localization	Cytoplasm. Nucleus. Predominantly cytoplasmic (By similarity). Nuclear at some stages of spermatozooids development. In midpachytene spermatocytes, it is localized in both the cytoplasm and the nuclei and is clearly excluded from the sex vesicles. In round spermatids, it localizes mainly in the nuclei, whereas in elongated spermatids, it localizes to the cytoplasm.

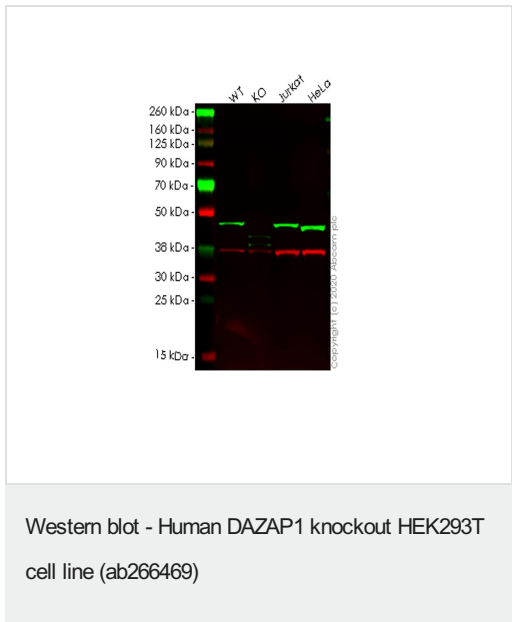
Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab266469 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

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WB		<p>Use at an assay dependent concentration. Predicted molecular weight: 43 kDa.</p> <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>

Images



All lanes : Anti-DAZAP1 antibody [EPR14400-60] ([ab184183](#)) at 1/1000 dilution

- Lane 1 :** Wild-type HEK293T cell lysate
- Lane 2 :** DAZAP1 knockout HEK293T cell lysate
- Lane 3 :** Jurkat cell lysate
- Lane 4 :** HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

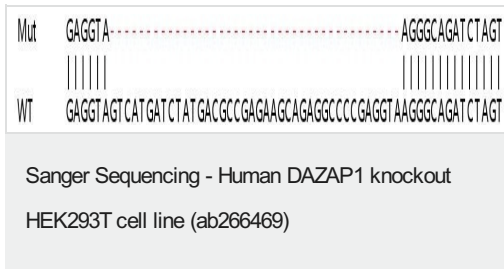
All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) at 1/10000 dilution

Predicted band size: 43 kDa
Observed band size: 43 kDa

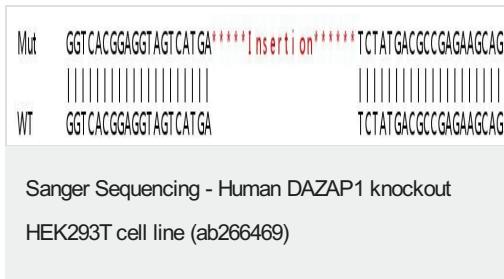
Lanes 1-4: Merged signal (red and green). Green - [ab184183](#) observed at 43 kDa. Red - loading control [ab8245](#) observed at 36 kDa.

[ab184183](#) Anti-DAZAP1 antibody [EPR14400-60] was shown to specifically react with DAZAP1 in wild-type HEK293T cells. The band observed in knockout cell line ab266469 (knockout cell lysate [ab257911](#)) lane below 43 kDa may represent truncated forms and cleaved fragments. This has not been investigated further. Wild-type and DAZAP1 knockout samples were subjected to SDS-PAGE. [ab184183](#) and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) 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](#))

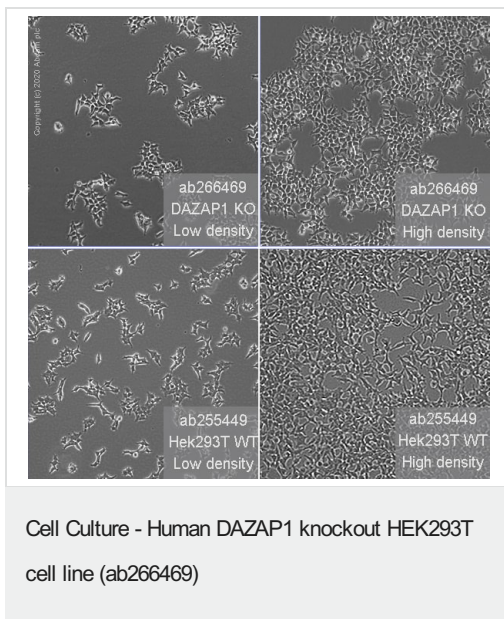
and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Allele-1: 40 bp deletion in exon 6



Allele-2: Insertion of the selection cassette in exon 6.



Representative images of DAZAP1 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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