

Product datasheet

Human PSME4 (Proteasome Activator Subunit 4) knockout HeLa cell line ab265661

2 Images

Overview

Product name	Human PSME4 (Proteasome Activator Subunit 4) knockout HeLa cell line
Parental Cell Line	HeLa
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, 1 bp insertion in exon 2 and 2 bp deletion in exon 2
Passage number	<20
Knockout validation	Sanger Sequencing
Biosafety level	2
General notes	<p>Recommended control: Human wild-type HeLa cell line (ab255928). 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>Cryopreservation cell medium: Cell Freezing Medium-DMSO Serum free media, contains 8.7% DMSO in MEM supplemented with methyl cellulose.</p> <p>Culture medium: DMEM (High Glucose) + 10% FBS</p> <p>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.</p> <ol style="list-style-type: none">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. <p>Subculture guidelines:</p> <p>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.</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

Number of cells	1 x 10 ⁶ cells/vial, 1 mL
Adherent /Suspension	Adherent
Tissue	Cervix
Cell type	epithelial
Disease	Adenocarcinoma
Gender	Female
STR Analysis	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
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	Activates proteasomal cleavage of peptides in an energy-independent manner. May be involved in spermatogenesis. May be involved in DNA repair.
Sequence similarities	Contains 6 HEAT repeats.
Cellular localization	Nucleus. Nucleus speckle. Found in nuclear foci following treatment with ionizing radiation, but not with ultraviolet irradiation or H(2).

Images

Mut	AAAAAGACTTACTTTAACAAGTTGATCAAA--GCGGGCAAATCCCTGCATCATGCTGATT
WT	AAAAAGACTTACTTTAACAAGTTGATCAAAAGCGGGCAAATCCCTGCATCATGCTGATT

Sanger Sequencing - Human PSME4 knockout
HeLa cell line (ab265661)

Allele-1: 2 bp deletion in exon 2.

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Mut  AAAAAAGACTTACTTTAACAAGTTGATCAAAAGAGCGGGGCAAATCCCTGCATCATGCTGAT
      |||
WT   AAAAAAGACTTACTTTAACAAGTTGATCAAAAGGCGGGGCAAATCCCTGCATCATGCTGAT
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Sanger Sequencing - Human PSME4 knockout
HeLa cell line (ab265661)

Allele-2: 1 bp insertion in exon 2.

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