

Product datasheet

Human SHC4 (SHCD) knockout HeLa cell line ab265660

2 Images

Overview

Product name	Human SHC4 (SHCD) knockout HeLa cell line
Parental Cell Line	HeLa
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, 1 bp deletion in exon 4 and 4 bp deletion in exon 4
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 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 (Click here to view haemocytometer protocol) or alternative cell counting method. Based on cell count, seed cells in an appropriate cell culture flask at a density of 2x10⁴ cells/cm². This should allow for confluency within 48 hours. 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 2x10⁴ cells/cm² is recommended for confluency (80-90% confluence) within 48 hours.</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.

[Click here to view the Mammalian cell tissue culture protocol](#)

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Properties

Number of cells	1 x 10 ⁶ cells/vial, 1 mL
Viability	~90%
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% DMSO, 2% Cellulose, methyl ether
Purity	Immunogen affinity purified

Target

Function	Activates both Ras-dependent and Ras-independent migratory pathways in melanomas. Contributes to the early phases of agrin-induced tyrosine phosphorylation of CHRNB1.
Tissue specificity	Only expressed in melanomas. Weakly expressed in normal melanocytes and benign nevi. Highly expressed at the transition from radial growth phase to vertical growth phase and metastatic melanomas, when tumor cells acquire migratory competence and invasive potential.
Sequence similarities	Contains 1 PID domain. Contains 1 SH2 domain.
Post-translational modifications	Phosphorylated; the phosphorylation is enhanced by EGF. Phosphorylation at Tyr-424 is required for the interaction with GRB2.
Cellular localization	Cell junction > synapse > postsynaptic cell membrane. Colocalized with MUSK at the neuromuscular junction.

Images

Mut	GCAGTCTCACATTGATGAATCTTGACAACCA----GTAAAGATCACAAATGTCATTATAG
WT	GCAGTCTCACATTGATGAATCTTGACAACCAACACAGTAAAGATCACAAATGTCATTATAG

Allele-1: 4 bp deletion in exon 4.

Sanger Sequencing - Human SHC4 knockout HeLa cell line (ab265660)

Mut	GCAGTCTCACATTGATGAATCTTGACAACCA-CAGTAAAGATCACAAATGTCATTATAG
WT	GCAGTCTCACATTGATGAATCTTGACAACCAACACAGTAAAGATCACAAATGTCATTATAG

Allele-2: 1 bp deletion in exon 4.

Sanger Sequencing - Human SHC4 knockout HeLa cell line (ab265660)

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