

Human RAB20 knockout HeLa cell line ab265924

3 Images

Overview

Product name	Human RAB20 knockout HeLa cell line
Parental Cell Line	HeLa
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, 22 bp deletion in exon 1 and 28 bp deletion in exon 1 and 34 bp deletion in exon 1
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 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

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	Plays a role in apical endocytosis/recycling. Plays a role in the maturation and acidification of phagosomes that engulf pathogens, such as S.aureus and M.tuberculosis. Plays a role in the fusion of phagosomes with lysosomes.
Tissue specificity	Low or absent expression in normal pancreas and stronger expression in 15 of 18 exocrine pancreatic adenocarcinomas (at protein level).
Sequence similarities	Belongs to the small GTPase superfamily. Rab family.
Cellular localization	Golgi apparatus. Cytoplasmic vesicle, phagosome. Cytoplasmic vesicle, phagosome membrane. Highly enriched on apical endocytic structures in polarized epithelial cells of kidney proximal tubules (By similarity). Recruited to phagosomes containing S.aureus or M.tuberculosis (PubMed:21255211).

Images

Mut	GGGAAGACGT CGCTGCTGCAGCGG.....TCAGCACG
WT	GGGAAGACGT CGCTGCTGCAGCGGTATATGGAGCGGCCTTCCCGACACGGT CAGCACG

Allele-1: 28 bp deletion in exon 1.

Sanger Sequencing - Human RAB20 knockout HeLa cell line (ab265924)

Mut	GGGAAGACGTCGCTGCTGCAGCGG-----ACACGGTCAGCACG
WT	GGGAAGACGTCGCTGCTGCAGCGGTATATGGAGCGGCCTTCCCGGACACGGTCAGCACG

Allele-2: 22 bp deletion in exon 1.

Sanger Sequencing - Human RAB20 knockout HeLa cell line (ab265924)

Mut	GGGAAGACGTCGCTGCTGCAGCGG-----CG
WT	GGGAAGACGTCGCTGCTGCAGCGGTATATGGAGCGGCCTTCCCGGACACGGTCAGCACG

Allele-3: 34 bp deletion in exon 1.

Sanger Sequencing - Human RAB20 knockout HeLa cell line (ab265924)

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