

Product data sheet

Human SLX4 Knockout A549 cell line (clone 14)

Catalog Number: A549KO-18633

Storage: Liquid nitrogen

Components: One vial of gene knockout cells (1×10^6 cells) and one vial of control parental cells (1×10^6)

Product description

Engineered clonal A549 cells with SLX4 gene knockout, sequence confirmed.

Cell line description

Parental cell line: A549

Genotype: SLX4^{-/-}

Organism: Homo sapiens (human)

Tissue: Lung

Morphology: epithelial-like

Culture Properties: Adherent

Biosafety Level: 2

Medium

1. Complete culture medium: DMEM with 10% fetal bovine serum (FBS)
2. Freeze medium: FBS with 6% DMSO

Culture procedure

Thawing of frozen cells

1. Thaw the frozen cryovial by gentle agitation in a 37 °C water bath in 1-2 minutes.
2. Remove the cryovial from the water bath as soon as the contents are thawed, and decontaminate by wiping with 70% ethanol.
3. Transfer the thawed cell suspension to a centrifuge tube containing 10 ml of Complete culture medium, centrifuge at 500 g for 5 minutes.
4. Remove the medium by aspiration, resuspend the cells with 10 ml of the Complete culture medium by gently pipetting up and down.
5. Transfer the cells to a 10 cm cell culture dish.
6. Place the cells in a 37°C incubator with 5% CO₂.

Sub-culturing

Volumes are given for a 10 cm cell culture dish. Increase or decrease the amount of dissociation medium needed proportionally.

1. Remove the medium by aspiration.
2. Briefly rinse the cell layer with 1xDPBS to remove all traces of serum that contains trypsin inhibitor.
3. Add 1 ml of Trypsin-EDTA (0.05%) solution to the dish and observe cells under an inverted microscope until cell layer is dispersed.
4. Add 4 ml of complete growth medium and aspirate cells by gently pipetting.
5. Add appropriate aliquots of the cell suspension to new culture vessels. Incubate cultures at 37°C with 5% CO₂.

Sequence Verification

Three different alleles were identified.

Type I:

KO

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GCCCCAACAGCGACTCCCGAGCCTCCTCCT-----AGCACAAATGGTCCTACAGCGAATGCAGCAGTTCA  
GCCCCAACAGCGACTCCCGAGCCTCCTCCTTCCTGTTTGACAAACAGCAGTGCCAAGTCCCTCCAAACCCCGCACAGCACAATGGTCCTACAGCGAATGCAGCAGTTCA
```

WT

There is a 44 bp deletion in exon 2.

Type II:

KO

```
AGAGAAATGTCGCCAACAGCGACTCCCGAGCCTCCCTCCT-----AGCACAAATGGTCCTACAGCGAATGCAGCAGTTCAAGA  
AGAGAAATGTCGCCAACAGCGACTCCCGAGCCTCCCTCCTTCCTGTTTGACAAACAGCAGTGCCAAGTCCCTCCAAACCCCGCACAGCACAATGGTCCTACAGCGAATGCAGCAGTTCAAGA
```

WT

There is a 43 bp deletion in exon 2.

Type III:

KO

```
GAGAAATGTCGCCAACAGCGACTCCCGAGCCTCCCTCCT-----CCTTTGAGACAGCTTCAGAAGAG  
GAGAAATGTCGCCAACAGCGACTCCCGAGCCTCCCTCCTTCCTGTTTGACAAACAGCAGTGCCAAGTCCCTCCAAACCCCGCACAGCACAATGGTCCTACAGCGAATGCAGCAGTTCAAGAAGAG
```

WT

There is a 96 bp deletion in exon 2, leading to a deletion of 32 amino acids (191-222).