

# GNAI3 Knockout HeLa Cell Line, Homozygous

Catalog No.: RM02240

## Basic Information

**Catalog No.**

RM02240

**Category**

Cell Line

**Parental Cell line**

HeLa

**Genotype**

Knockout

## Gene Information

**Gene Symbol**

GNAI3

**Species**

Human

**Gene ID**

2773


**Swiss Prot**

P08754

**Synonyms**

87U6; ARCND1

## Contact

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## Background

Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling pathways. G proteins are composed of 3 units: alpha, beta and gamma. This gene encodes an alpha subunit and belongs to the G-alpha family. Mutation in this gene, resulting in a gly40-to-arg substitution, is associated with auriculocondylar syndrome, and shown to affect downstream targets in the G protein-coupled endothelin receptor pathway. [provided by RefSeq, Jun 2012]

## Product Information

**Description**

GNAI3 Knockout cell line is engineered from HeLa cell line with Gene-Editing Technology.

Allele-1:70bp deletion in exon1

Allele-2:71bp deletion in exon1

Mammalian cells such as human, rat and mouse cells are normally diploid with two alleles. Homozygote: both alleles were knocked out, mRNA has no signal, no expression of proteins. Heterozygote: only one allele was knocked out, the mRNA transcript levels was decreased compared to wild type, and the protein expression levels was also lower than that of the wild type.

**Packaging**

1 vial parental cell line and 1 vial knockout cell line

**Shipping Conditions**

Dry ice

**Amount**

1~5x10<sup>6</sup> cells/vial

**Storage**

Stored in liquid nitrogen for a long time less than -130°C. Minimizing freeze-thaw cycles.

**Protocol**

Upon arrival, it should be maintained in DMEM medium with 10%(v/v) fetal bovine serum and 100U penicillin-streptomycin, at 37°C with 5% CO<sub>2</sub> condition.

1. Thaw the vial in 37°C water bath, and shake it to melt as soon as possible.
2. Transfer the cell suspension to a 15mL conical tube with pre-warmed 5mL complete medium and centrifuge 1000rpm for approximately 5 minutes at room temperature.
3. Remove and discard the supernatant.
4. Resuspend the cell pellet with 1mL pre-warmed complete medium and seed in 10cm dish.
5. Add 8-10mL of complete medium.
6. Incubate the culture at 37°C incubator with 5% CO<sub>2</sub>.
7. A subcultivation ratio of 1:2-1:4 is recommended.

## Sequencing data

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WT TCAGCCTGCCGAGC\*\*\*\*\*GGGAGGACGGGGAA  
Mut TCAGCCTGCCGAGC\*\*\*Deletion\*\*\*GGGAGGACGGGGAA  
Allele-1: 70bp deletion in exon1

WT AGCCTGCCGAGCCG\*\*\*\*\*GGAGGACGGGGAAA  
Mut AGCCTGCCGAGCCG\*\*\*Deletion\*\*\*GGAGGACGGGGAAA  
Allele-2: 71bp deletion in exon1

Genome sequence analysis of PCR products from parental (WT) and GNAI3 knockout (KO) HeLa cells, using sanger sequencing.