

DCN Knockout HeLa Cell Line, Homozygous

Catalog No.: RM01860

Basic Information

Catalog No.

RM01860

Category

Cell Line

Parental Cell line

HeLa

Genotype

Knockout

Gene Information

Gene Symbol

DCN

Species

Human

Gene ID

1634

Swiss Prot

P07585

Synonyms

CSCD; DSPG2; PG40; PGII; PGS2; SLRR1B

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Background

This gene encodes a member of the small leucine-rich proteoglycan family of proteins. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate the mature protein. This protein plays a role in collagen fibril assembly. Binding of this protein to multiple cell surface receptors mediates its role in tumor suppression, including a stimulatory effect on autophagy and inflammation and an inhibitory effect on angiogenesis and tumorigenesis. This gene and the related gene biglycan are thought to be the result of a gene duplication. Mutations in this gene are associated with congenital stromal corneal dystrophy in human patients. [provided by RefSeq, Nov 2015]

Product Information

Description

DCN Knockout HeLa Cell Line is engineered from HeLa cell line with Gene-Editing Technology.

Allele-1:77bp deletion in exon1

Allele-2:77bp 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

1~5x10⁶ 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% CO₂ 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% CO₂.
7. A subcultivation ratio of 1:2-1:4 is recommended.

Sequencing data

WT CCTGGGCTGGACCG*****CGACTTCGAGCCCT
Mut CCTGGGCTGGACCG***Deletion***CGACTTCGAGCCCT
Allele-1: 77bp deletion in exon1
WT CCTGGGCTGGACCG*****CGACTTCGAGCCCT
Mut CCTGGGCTGGACCG***Deletion***CGACTTCGAGCCCT
Allele-2: 77bp deletion in exon1

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