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# CHP1 Knockout 293T Cell Line, Homozygous

Catalog No.: RM02754



## **Basic Information**

Catalog No. RM02754

Category Cell Line

Parental Cell line 293T

Genotype Knockout

## **Gene Information**

Gene Symbol CHP1

Species Human

Gene ID 11261

#### Swiss Prot Q99653

Synonyms

CHP; p22; p24; SPAX9; Sid470p; SLC9A1BP; CHP1

## Contact

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## Background

This gene encodes a phosphoprotein that binds to the Na+/H+ exchanger NHE1. This protein serves as an essential cofactor which supports the physiological activity of NHE family members and may play a role in the mitogenic regulation of NHE1. The protein shares similarity with calcineurin B and calmodulin and it is also known to be an endogenous inhibitor of calcineurin activity.

## **Product Information**

#### Description

CHP1 Knockout cell line is engineered from 293T cell line with Gene-Editing Technology. Allele-1:exon1 was deleted

Allele-2:exon1 was deleted

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%  $CO_2$  condition.

- 1. Thaw the vial in  $37^{\circ}$ C water bath ,and shake it to melt as soon as possible.
- 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.
  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%  $\rm CO_2.$
- 7. A subcultivation ratio of 1:2-1:4 is recommended.

## Sequencing data

WT GGAGCTCCCGGCAC\*\*\*\*\*\*\*\*\*\*TAAGGTCTGGAGC Mut GGACTCCCGGCAC\*\*\*Deletion\*\*\*TAAGGTCTGGAGC Allele-1: exon1 was deleted

WT AGGAGCTCCCGGCA\*\*\*\*\*\*\*\*\*\*TAAGGTCTGGAGC Mut AGGAGCTCCCGGCA\*\*\*Deletion\*\*\*TAAGGTCTGGAGC Allele-2: exon1 was deleted Genome sequence analysis of PCR products from parental (WT) and CHP1 knockout (KO) 293T cells, using sanger sequencing.