Leader in Biomolecular Solutions for Life Science

www.abclonal.com

# SIRT3 Knockout 293T Cell Line, Homozygous

**Catalog No.: RM01802**

## Basic Information

**Catalog No.**
RM01802

**Category**
Cell Line

**Parental Cell line**
293T

**Genotype**
Knockout

## Background

This gene encodes a member of the sirtuin family of proteins, homologs to the yeast Sir2 protein. Members of the sirtuin family are characterized by a sirtuin core domain and grouped into four classes. The functions of human sirtuins have not yet been determined; however, yeast sirtuin proteins are known to regulate epigenetic gene silencing and suppress recombination of rDNA. Studies suggest that the human sirtuins may function as intracellular regulatory proteins with mono-ADP-ribosyltransferase activity. The protein encoded by this gene is included in class I of the sirtuin family. Two alternatively spliced transcript variants that encode different proteins have been described for this gene.

## Gene Information

**Gene Symbol**
SIRT3

**Species**
Human

**Gene ID**
23410

**Swiss Prot**
Q9NTG7

**Synonyms**
SIR2L3

## Product Information

**Description**
SIRT3 Knockout cell line is engineered from 293T cell line with Gene-Editing Technology.
Allele-1:128bp deletion in exon2
Allele-2:128bp deletion in exon2
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**
1~5x$10^6$ cells/vial.

**Storage**
Store at -20℃

**Protocol**
Upon arrival, it should be maintained in DMEM medium with 10%(v/v) fetal bovine serum and 100U penicillin-streptomycin, at 37℃ with 5% $CO_2$ condition.
1. Thaw the vial in 37℃ 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℃ incubator with 5% $CO_2$.
7. A subcultivation ratio of 1:2-1:4 is recommended.

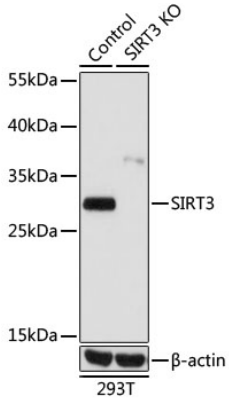
## Contact


400-999-6126

cn.market@abclonal.com.cn

www.abclonal.com.cn

## WB data




Western blot analysis of extracts from parental (Control) and SIRT3 knockout (KO) 293T cells, using SIRT3 antibody (A5718) at 1:1000 dilution.

## Sequencing data

WT CGATCTCCCGTACC**********AAGGGGCTGCTTCT
Mut CGATCTCCCGTACC***Deletion***AAGGGGCTGCTTCT
Allele-1: 128bp deletion in exon2

WT CGATCTCCCGTACC**********AAGGGGCTGCTTCT
Mut CGATCTCCCGTACC***Deletion***AAGGGGCTGCTTCT
Allele-2: 128bp deletion in exon2

Genome sequence analysis of PCR products from parental (WT) and SIRT3 knockout (KO) 293T cells, using sanger sequencing.