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HDAC1 Knockout 293T Cell Line, Homozygous

Catalog No.: RM01807

Basic Information

Catalog No.
RM01807

Category
Cell Line

Parental Cell line
293T

Genotype
Knockout

Background

Histone acetylation and deacetylation, catalyzed by multisubunit complexes, play a key role in the regulation of eukaryotic gene expression. The protein encoded by this gene belongs to the histone deacetylase/acuc/apha family and is a component of the histone deacetylase complex. It also interacts with retinoblastoma tumor-suppressor protein and this complex is a key element in the control of cell proliferation and differentiation. Together with metastasis-associated protein-2, it deacetylates p53 and modulates its effect on cell growth and apoptosis.

Gene Information

Gene Symbol
HDAC1

Species
Human

Gene ID
3065

Swiss Prot
Q13547

Synonyms
GON-10; HD1; RPD3; RPD3L1

Product Information

Description
HDAC1 Knockout cell line is engineered from 293T cell line with Gene-Editing Technology.
Allele-1:49bp deletion in exon2
Allele-2:49bp 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
1~5x10^6 cells/vial.

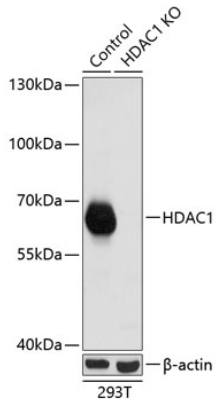
Storage
Store at -20℃

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

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WB data



Western blot analysis of extracts from parental (Control) and HDAC1 knockout (KO) 293T cells, using HDAC1 antibody at 1:1000 dilution.

Sequencing data

WT CAATGAAGCCTCAC**********AAATGGAAATCTAT
Mut CAATGAAGCCTCAC***Deletion***AAATGGAAATCTAT
Allele-1: 49bp deletion in exon2

WT CAATGAAGCCTCAC**********AAATGGAAATCTAT
Mut CAATGAAGCCTCAC***Deletion***AAATGGAAATCTAT
Allele-2: 49bp deletion in exon2

Genome sequence analysis of PCR products from parental (WT) and HDAC1 knockout (KO) 293T cells, using sanger sequencing.