Leader in Biomolecular Solutions for Life Science

www.abclonal.com

DNMT3B Knockout 293T Cell Line, Homozygous

Catalog No.: RM01905

Basic Information

Catalog No.
RM01905

Category
Cell Line

Parental Cell line
293T

Genotype
Knockout

Background

CpG methylation is an epigenetic modification that is important for embryonic development, imprinting, and X-chromosome inactivation. Studies in mice have demonstrated that DNA methylation is required for mammalian development. This gene encodes a DNA methyltransferase which is thought to function in de novo methylation, rather than maintenance methylation. The protein localizes primarily to the nucleus and its expression is developmentally regulated. Mutations in this gene cause the immunodeficiency-centromeric instability-facial anomalies (ICF) syndrome. Eight alternatively spliced transcript variants have been described. The full length sequences of variants 4 and 5 have not been determined. [provided by RefSeq, May 2011]

Gene Information

Gene Symbol
DNMT3B

Species
Human

Gene ID
1789

Swiss Prot
Q9UBC3

Synonyms
ICF; ICF1; M.HsaIIIB

Contact

400-999-6126

cn.market@abclonal.com.cn

www.abclonal.com.cn

Product Information

Description
DNMT3B Knockout 293T Cell Line is engineered from 293T cell line with Gene-Editing Technology.
Allele-1:106bp deletion in exon3
Allele-2:106bp deletion in exon3
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
Stored in liquid nitrogen for a long time less than -130℃. 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℃ 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.

Sequencing data

WT GGGCAACAGCATCG**********CCCGCCTAGCCCAG
Mut GGGCAACAGCATCG***Deletion***CCCGCCTAGCCCAG
Allele-1: 106bp deletion in exon3

WT GGGCAACAGCATCG**********CCCGCCTAGCCCAG
Mut GGGCAACAGCATCG***Deletion***CCCGCCTAGCCCAG
Allele-2: 106bp deletion in exon3

Genome sequence analysis of PCR products from parental (WT) and DNMT3B knockout (KO) 293T cells, using sanger sequencing.

For research use only. Not for therapeutic or diagnostic purposes.
Please visit http://abclonal.com for a complete listing of recommended products.