Leader in Biomolecular Solutions for Life Science

www.abclonal.com

MAPT Knockout HeLa Cell Line, Homozygous

Catalog No.: RM01919

Basic Information

Catalog No.
RM01919

Category
Cell Line

Parental Cell line
HeLa

Genotype
Knockout

Background

This gene encodes the microtubule-associated protein tau (MAPT) whose transcript undergoes complex, regulated alternative splicing, giving rise to several mRNA species. MAPT transcripts are differentially expressed in the nervous system, depending on stage of neuronal maturation and neuron type. MAPT gene mutations have been associated with several neurodegenerative disorders such as Alzheimer's disease, Pick's disease, frontotemporal dementia, cortico-basal degeneration and progressive supranuclear palsy. [provided by RefSeq, Jul 2008]

Gene Information

Gene Symbol
MAPT

Species
Human

Gene ID
4137

Swiss Prot
P10636

Synonyms
DDPAC; FTDP-17; MAPTL; MSTD; MTBT1; MTBT2; PPND; PPP1R103; TAU

Product Information

Description
MAPT Knockout HeLa Cell Line is engineered from HeLa cell line with Gene-Editing Technology.
Allele-1:149bp deletion in exon3
Allele-2:151bp 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.

Contact

400-999-6126
cn.market@abclonal.com.cn
www.abclonal.com.cn

Sequencing data

```
WT    GACCTATCCCAGAG**************TGCCACGGAGCTCT
Mut   GACCTATCCCAGAG***Deletion***TGCCACGGAGCTCT
Allele-1：149bp deletion in exon3

WT    GACCTATCCCAGAG**************CCACGGAGCTCTGC
Mut   GACCTATCCCAGAG***Deletion***CCACGGAGCTCTGC
Allele-2：151bp deletion in exon3
```

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