# TUBB3 Knockdown HeLa Cell Line, Heterozygous

Catalog No.: RM01947



## **Basic Information**

Catalog No. RM01947

Category Cell Line

Parental Cell line HeLa

Genotype Knockdown

## **Gene Information**

Gene Symbol TUBB3

Species Human

Gene ID 10381

Swiss Prot Q13509

Synonyms

CDCBM; CDCBM1; CFEOM3; CFEOM3A; FEOM3; TUBB4; beta-4

### Contact

6	400-999-6126
$\bowtie$	cn.market@abclonal.com.cn
€	www.abclonal.com.cn

## Background

This gene encodes a class III member of the beta tubulin protein family. Beta tubulins are one of two core protein families (alpha and beta tubulins) that heterodimerize and assemble to form microtubules. This protein is primarily expressed in neurons and may be involved in neurogenesis and axon guidance and maintenance. Mutations in this gene are the cause of congenital fibrosis of the extraocular muscles type 3. Alternate splicing results in multiple transcript variants. A pseudogene of this gene is found on chromosome 6. [provided by RefSeq, Oct 2010]

## **Product Information**

#### Description

TUBB3 Knockdown HeLa Cell Line is engineered from HeLa cell line with Gene-Editing Technology.

Allele-1:120bp deletion and 31bp insertion in exon2

Allele-2:117bp 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<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  $37^{\circ}$ C with 5% CO<sub>2</sub> condition.

- 1. Thaw the vial in 37°C 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°C incubator with 5%  $\mbox{CO}_2.$
- 7. A subcultivation ratio of 1:2-1:4 is recommended.

## Sequencing data

WT CAAGGGTCACTACA\*\*\*\*\*\*\*\*\*\*\*TGGGCACGTTGCTC Mut CAAGGGTCACTACA\*\*\*Deletion\*\*\*TGGGCACGTTGCTC Allele-1: 120bp deletion and 31bp insertion in exon2

WT GGGTCACTACACGG\*\*\*\*\*\*\*\*\*\*GGGCACGTTGCTC Mut GGGTCACTACACGG\*\*\*Deletion\*\*\*TGGGCACGTTGCTC Allele-2: 117bp deletion in exon2 Genome sequence analysis of PCR products from parental (WT) and TUBB3 Knockdown (KD) HeLa cells, using sanger sequencing.