

TET2 Knockdown 293T Cell Line, Heterozygous

Catalog No.: RM50115

Basic Information

Catalog No.

RM50115

Category

Cell Line

Parental Cell line

293T

Genotype

Knockdown

Gene Information

Gene Symbol

TET2

Species

Human

Gene ID

54790

Swiss Prot

Q6N021

Synonyms

MDS; IMD75; KIAA1546; TET2

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Background

The protein encoded by this gene is a methylcytosine dioxygenase that catalyzes the conversion of methylcytosine to 5-hydroxymethylcytosine. The encoded protein is involved in myelopoiesis, and defects in this gene have been associated with several myeloproliferative disorders. Two variants encoding different isoforms have been found for this gene.

Product Information

Description

TET2 Knockdown cell line is engineered from 293T cell line with Gene-Editing Technology.

Allele-1:160bp deletion in exon1

Allele-2:174bp deletion in exon1

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

1~5x10⁶ 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°C with 5% CO₂ 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% CO₂.
7. A subcultivation ratio of 1:2-1:4 is recommended.

Sequencing data

WT AGGGAAGCCAGAAT*****TCGGGGTAAGCCAA
Mut AGGGAAGCCAGAAT***Deletion***TCGGGGTAAGCCAA
Allele-1: 160bp deletion in exon1

Genome sequence analysis of PCR products from parental (WT) and TET2 knockdown (KD) 293T cells, using sanger sequencing.

WT AATACCCTGTATGA*****TCGGGGTAAGCCAA
Mut AATACCCTGTATGA***Deletion***TCGGGGTAAGCCAA
Allele-2: 174bp deletion in exon1