

MSH6 Knockout 293T Cell Line, Homozygous

Catalog No.: RM02427

Basic Information

Catalog No.

RM02427

Category

Cell Line

Parental Cell line

293T

Genotype

Knockout

Gene Information

Gene Symbol

MSH6

Species

Human

Gene ID

2956

Swiss Prot

P52701

Synonyms

GTBP; GTMBP; HNPCC5; HSAP; p160

Contact

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

Background

This gene encodes a member of the DNA mismatch repair MutS family. In *E. coli*, the MutS protein helps in the recognition of mismatched nucleotides prior to their repair. A highly conserved region of approximately 150 aa, called the Walker-A adenine nucleotide binding motif, exists in MutS homologs. The encoded protein heterodimerizes with MSH2 to form a mismatch recognition complex that functions as a bidirectional molecular switch that exchanges ADP and ATP as DNA mismatches are bound and dissociated. Mutations in this gene may be associated with hereditary nonpolyposis colon cancer, colorectal cancer, and endometrial cancer. Transcripts variants encoding different isoforms have been described. [provided by RefSeq, Jul 2013]

Product Information

Description

MSH6 Knockout 293T Cell line is engineered from 293T cell line with Gene-Editing Technology.

Allele-1:106bp deletion in exon4

Allele-2:106bp deletion in exon4

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 TCCCAAGCCACGT*****CACCCGATTTGA
Mut TCCCAAGCCACGT***Deletion***CACCCGATTTGA
Allele-1: 106bp deletion in exon4

WT TCCCAAGCCACGT*****CACCCGATTTGA
Mut TCCCAAGCCACGT***Deletion***CACCCGATTTGA
Allele-2: 106bp deletion in exon4

Genome sequence analysis of PCR products from parental (WT) and MSH6 knockout (KO) 293T cells, using sanger sequencing.