

# MYC Knockdown HCT116 Cell Line, Heterozygous

**Catalog No.:** RM02107

## Basic Information

**Catalog No.**

RM02107

**Category**

Cell Line

**Parental Cell line**

HCT116

**Genotype**

Knockdown

## Gene Information

**Gene Symbol**

MYC

**Species**

Human

**Gene ID**

4609

**Swiss Prot**

P01106

**Synonyms**

MRTL; MYCC; bHLHe39; c-Myc

## Contact

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## Background

The protein encoded by this gene is a multifunctional, nuclear phosphoprotein that plays a role in cell cycle progression, apoptosis and cellular transformation. It functions as a transcription factor that regulates transcription of specific target genes. Mutations, overexpression, rearrangement and translocation of this gene have been associated with a variety of hematopoietic tumors, leukemias and lymphomas, including Burkitt lymphoma. There is evidence to show that alternative translation initiations from an upstream, in-frame non-AUG (CUG) and a downstream AUG start site result in the production of two isoforms with distinct N-termini. The synthesis of non-AUG initiated protein is suppressed in Burkitt's lymphomas, suggesting its importance in the normal function of this gene. [provided by RefSeq, Jul 2008]

## Product Information

**Description**

MYC Knockdown HCT116 Cell Line is engineered from HCT116 cell line with Gene-Editing Technology.

Allele-1:177bp deletion in exon2

Allele-2:199bp 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°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% CO<sub>2</sub>.
7. A subcultivation ratio of 1:2-1:4 is recommended.

## Sequencing data

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WT    ACTATGACCTCGAC\*\*\*\*\*GTTGCGGTCACACC  
Mut   ACTATGACCTCGAC\*\*\*Deletion\*\*\*GTTGCGGTCACACC  
Allele-1: 177bp deletion in exon2

WT    CTTACCAACAGGA\*\*\*\*\*CACACCCTTCTCCC  
Mut   CTTACCAACAGGA\*\*\*Deletion\*\*\*GTACACCCTTCTCCC  
Allele-2: 199bp deletion in exon2

Genome sequence analysis of PCR products from parental (WT) and MYC Knockdown (KD) HCT116 cells, using sanger sequencing.