

# EIF4G2 Knockdown A549 Cell Line, Heterozygous

**Catalog No.:** RM02757

## Basic Information

**Catalog No.**

RM02757

**Category**

Cell Line

**Parental Cell line**

A549

**Genotype**

Knockdown

## Gene Information

**Gene Symbol**

EIF4G2

**Species**

Human

**Gene ID**

1982

**Swiss Prot**

P78344

**Synonyms**

P97; AAG1; DAP5; NAT1; EIF4G2/p97

## Contact

 | 400-999-6126 | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn) | [www.abclonal.com.cn](http://www.abclonal.com.cn)

## Background

Translation initiation is mediated by specific recognition of the cap structure by eukaryotic translation initiation factor 4F (eIF4F), which is a cap binding protein complex that consists of three subunits: eIF4A, eIF4E and eIF4G. The protein encoded by this gene shares similarity with the C-terminal region of eIF4G that contains the binding sites for eIF4A and eIF3; eIF4G, in addition, contains a binding site for eIF4E at the N-terminus. Unlike eIF4G, which supports cap-dependent and independent translation, this gene product functions as a general repressor of translation by forming translationally inactive complexes. In vitro and in vivo studies indicate that translation of this mRNA initiates exclusively at a non-AUG (GUG) codon. Alternatively spliced transcript variants encoding different isoforms of this gene have been described.

## Product Information

**Description**

EIF4G2 Knockdown A549 cell line is engineered from A549 cell line with Gene-Editing Technology.

Allele-1: exon1 was deleted

Allele-2: WT

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

---

WT CGTTGTCAAGCC \*\*\*\*\*AATGGGCTGCAATT  
Mut CGTTGTCAAGCC\*\*\*Deletion\*\*\*AATGGGCTGCAATT  
Allele-1: exon1 was deleted

WT TTCGTTGTCAAGCC\*\*\*\*\*AATGGGCTGCAATT  
Mut TTCGTTGTCAAGCC\*\*\*\*\*AATGGGCTGCAATT  
Allele-2: WT

Genome sequence analysis of PCR products from parental (WT) and EIF4G2 knockdown (KD) A549 cells, using sanger sequencing.