

# MICU1 Knockout 293T Cell Lysate, Homozygous

**Catalog No.:** RM50159

## Basic Information

### Catalog No.

RM50159

### Category

Cell Lysate

### Parental Cell line

293T

### Genotype

Knockout

## Gene Information

### Gene Symbol

MICU1

### Species

Human

### Gene ID

10367

### Swiss Prot

Q9BPX6

### Synonyms

CALC; EFHA3; MPXPS; CBARA1; ara  
CALC; MICU1

## 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

This gene encodes an essential regulator of mitochondrial  $\text{Ca}^{2+}$  uptake under basal conditions. The encoded protein interacts with the mitochondrial calcium uniporter, a mitochondrial inner membrane  $\text{Ca}^{2+}$  channel, and is essential in preventing mitochondrial  $\text{Ca}^{2+}$  overload, which can cause excessive production of reactive oxygen species and cell stress. Alternatively spliced transcript variants encoding different isoforms have been described.

## Product Information

### Description

MICU1 Knockout cell line is engineered from 293T cell line with Gene-Editing Technology.

Allele-1:133bp deletion in exon3

Allele-2:133bp deletion in exon3

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 Lysate and 1 vial knockout cell Lysate

### Shipping Conditions

4°C

### Amount

50μL, 2μg/μL.

### Storage

Lysate is stable for 12 months when stored at -20°C. Minimizing freeze-thaw cycles.

### Protocol

To be used as WB control. Lysate is supplied in 1× SDS sample buffer (2% SDS, 60 mM Tris-HCl pH 6.8, 10% Glycerol, 0.02% Bromophenol blue, 60 mM beta-mercaptoethanol). Lysate should be boiled for 3 - 5 minutes before loading onto gel.

## Sequencing data

---

WT CATTGCTCCCAA\*\*\*\*\*ATTTCAGCGTAAAC  
Mut CATTGCTCCCAA\*\*\*Deletion\*\*\*ATTTCAGCGTAAAC  
Allele-1: 133bp deletion in exon3

WT CATTGCTCCCAA\*\*\*\*\*ATTTCAGCGTAAAC  
Mut CATTGCTCCCAA\*\*\*Deletion\*\*\*ATTTCAGCGTAAAC  
Allele-2: 133bp deletion in exon3

Genome sequence analysis of PCR products from parental (WT) and MICU1 knockout (KO) 293T cells, using sanger sequencing.