

# Resource Summary Report

Generated by [RRID](#) on Aug 25, 2026

## pDEST47-MCU-GFP

RRID:Addgene\_31732

Type: Plasmid

### Proper Citation

RRID:Addgene\_31732

### Plasmid Information

**URL:** <http://www.addgene.org/31732>

**Proper Citation:** RRID:Addgene\_31732

**Insert Name:** MCU

**Organism:** Homo sapiens

**Bacterial Resistance:** Ampicillin

**Defining Citation:** [PMID:21685886](#)

**Vector Backbone Description:** Backbone Marker:Invitrogen (Cat#V355-20); Backbone Size:5784; Vector Backbone:pcDNA6.2/C-EmGFP-DEST; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

**Comments:** \*A2T aa residue substitution in MCU, which is not known to affect protein function

**Plasmid Name:** pDEST47-MCU-GFP

**Relevant Mutation:** \*

**Record Creation Time:** 20220422T222137+0000

**Record Last Update:** 20260815T081339+0000

### Ratings and Alerts

No rating or validation information has been found for pDEST47-MCU-GFP.

No alerts have been found for pDEST47-MCU-GFP.

### Data and Source Information

Source: [Addgene](#)

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## Usage and Citation Metrics

We found 7 mentions in open access literature.

**Listed below are recent publications.** The full list is available at [RRID](#) .

Prashar A, et al. (2024) Lysosomes drive the piecemeal removal of mitochondrial inner membrane. *Nature*, 632(8027), 1110.

Yuan L, et al. (2023) Mitochondrial calcium uniporter activates TFEB-driven autophagy to promote migration of breast cancer cells. *Iranian journal of basic medical sciences*, 26(11), 1342.

Tanwar J, et al. (2023) Mitochondrial calcium signaling mediated transcriptional regulation of keratin filaments is a critical determinant of melanogenesis. *bioRxiv : the preprint server for biology*.

Zhao M, et al. (2019) Mitochondrial calcium dysfunction contributes to autophagic cell death induced by MPP+ via AMPK pathway. *Biochemical and biophysical research communications*, 509(2), 390.

Wang H, et al. (2018) Mitochondrial calcium uniporter-mediated inhibition of 1-methyl-4-phenylpyridinium ions neurotoxicity in PC12 cells. *Neuroreport*, 29(7), 570.

Chakrabarti R, et al. (2018) INF2-mediated actin polymerization at the ER stimulates mitochondrial calcium uptake, inner membrane constriction, and division. *The Journal of cell biology*, 217(1), 251.

Yang X, et al. (2014) Role of the mitochondrial  $\text{Ca}^{2+}$  uniporter in  $\text{Pb}^{2+}$ -induced oxidative stress in human neuroblastoma cells. *Brain research*, 1575, 12.