

Resource Summary Report

Generated by [PRECISE-TBI](#) on Sep 1, 2026

[pMitoTimer](#)

RRID:Addgene_52659

Type: Plasmid

Proper Citation

RRID:Addgene_52659

Plasmid Information

URL: <http://www.addgene.org/52659>

Proper Citation: RRID:Addgene_52659

Insert Name: DsRed1-E5

Organism: Discosoma

Bacterial Resistance: Kanamycin

Defining Citation: [PMID:24644293](#)

Vector Backbone Description: Backbone Marker:Clontech; Backbone Size:3959; Vector Backbone:pDsRed2-Mito; Vector Types:DsRed; Bacterial Resistance:Kanamycin

Plasmid Name: pMitoTimer

Record Creation Time: 20220422T222309+0000

Record Last Update: 20260829T080651+0000

Ratings and Alerts

No rating or validation information has been found for pMitoTimer.

No alerts have been found for pMitoTimer.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 46 mentions in open access literature.

Listed below are recent publications. The full list is available at [PRECISE-TBI](#) .

Kim MJ, et al. (2026) Hells protects mitochondrial integrity via Nr2f2 suppression during osteoclast differentiation. *Cell communication and signaling : CCS*, 24(1).

Mahadev Bhat S, et al. (2026) Fluorescence-based quantification of mitochondrial damage in human airway smooth muscle cells. *American journal of physiology. Cell physiology*, 330(5), C1336.

Wakula M, et al. (2026) Granulocyte differentiation arrest in HAX1-deficient cells, demonstrated in a new in vitro model of a certain phenotypic aspects of Kostmann disease, is caused by ineffective lipid droplet autophagy and fatty acids uptake. *Cell death & disease*, 17(1).

Bao L, et al. (2026) Drp1 Interaction with BIP Maintains Mitochondrial Dynamic Equilibrium to Promote Anoikis Resistance and Metastasis in Nasopharyngeal Carcinoma. *Cancer research*, 86(6), 1451.

Matamoros A, et al. (2026) FAM162A Is a Key Regulator of Mitochondrial Structure, Dynamics, and Bioenergetics, Driving Cellular Protection and Longevity. *Aging cell*, 25(5), e70508.

Zhong Y, et al. (2026) Vertebral BMSC-EVs under estrogen deficiency drive senescence-related mitochondrial dysfunction in endplate chondrocytes via MRPL1 mRNA delivery. *Experimental & molecular medicine*, 58(5), 1522.

Ding C, et al. (2025) Reactive oxygen species counteract zebrafish wound contraction and promote wound healing. *Biophysical journal*.

Nadtochy JA, et al. (2025) Transgenic iPSC Lines with Genetically Encoded MitoTimer to Study Mitochondrial Biogenesis in Dopaminergic Neurons with Tauopathy. *Biomedicines*, 13(3).

Gao T, et al. (2025) HSPA4 restrains transferrin in dopaminergic neurons to attenuate ferroptosis in a Parkinson's disease model. *Communications biology*, 8(1), 1453.

Sobrido-Cameán D, et al. (2025) Mitochondrial ROS and HIF-1 α signaling mediate synaptic plasticity in the critical period. *PLoS biology*, 23(8), e3003338.

Liu D, et al. (2025) Optineurin-facilitated axonal mitochondria delivery promotes neuroprotection and axon regeneration. *Nature communications*, 16(1), 1789.

Kowluru RA, et al. (2024) Impaired Removal of the Damaged Mitochondria in the Metabolic Memory Phenomenon Associated with Continued Progression of Diabetic Retinopathy. *Molecular neurobiology*, 61(1), 188.

Zhu X, et al. (2024) An engineered cellular carrier delivers miR-138-5p to enhance mitophagy and protect hypoxic-injured neurons via the DNMT3A/Rheb1 axis. *Acta biomaterialia*, 186, 424.

Liu D, et al. (2024) Optineurin-facilitated axonal mitochondria delivery promotes neuroprotection and axon regeneration. *bioRxiv : the preprint server for biology*.

Hu B, et al. (2023) Local GHR roles in regulation of mitochondrial function through mitochondrial biogenesis during myoblast differentiation. *Cell communication and signaling : CCS*, 21(1), 148.

Sanchez L, et al. (2023) SIM2s directed Parkin-mediated mitophagy promotes mammary epithelial cell differentiation. *Cell death and differentiation*.

Syahirah R, et al. (2023) Method for Visualization of Emergency Granulopoiesis in the Zebrafish Embryo. *Zebrafish*, 20(4), 175.

Pacak CA, et al. (2023) One episode of low intensity aerobic exercise prior to systemic AAV9 administration augments transgene delivery to the heart and skeletal muscle. *Journal of translational medicine*, 21(1), 748.

He B, et al. (2023) Cancer cell employs a microenvironmental neural signal trans-activating nucleus-mitochondria coordination to acquire stemness. *Signal transduction and targeted therapy*, 8(1), 275.

Lumibao JC, et al. (2023) CHCHD2 mediates glioblastoma cell proliferation, mitochondrial metabolism, hypoxia-induced invasion and therapeutic resistance. *International journal of oncology*, 63(5).