

Resource Summary Report

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

PGC-1 alpha promoter 2kb luciferase

RRID:Addgene_8887

Type: Plasmid

Proper Citation

RRID:Addgene_8887

Plasmid Information

URL: <http://www.addgene.org/8887>

Proper Citation: RRID:Addgene_8887

Insert Name: PGC-1 alpha promoter

Organism: Mus musculus

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:12764228](#)

Vector Backbone Description: Backbone Marker:Promega; Backbone Size:4818; Vector Backbone:pGL3-basic; Vector Types:Mammalian Expression, Luciferase; Bacterial Resistance:Ampicillin

Comments: 5' flanking sequence of mouse PGC-1 alpha gene PCR amplified between +78 and -2533 with respect to the transcriptional start site.

Plasmid Name: PGC-1 alpha promoter 2kb luciferase

Record Creation Time: 20220422T222606+0000

Record Last Update: 20260815T082152+0000

Ratings and Alerts

No rating or validation information has been found for PGC-1 alpha promoter 2kb luciferase.

No alerts have been found for PGC-1 alpha promoter 2kb luciferase.

Data and Source Information

Usage and Citation Metrics

We found 29 mentions in open access literature.

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

Qaqorh T, et al. (2025) Atf3 controls transitioning in female mitochondrial cardiomyopathy as identified by spatial and single-cell transcriptomics. *Science advances*, 11(14), eadq1575.

You CL, et al. (2023) Inonotus obliquus upregulates muscle regeneration and augments function through muscle oxidative metabolism. *International journal of biological sciences*, 19(15), 4898.

Hachiya K, et al. (2023) Obesity-induced PARIS (ZNF746) accumulation in adipose progenitor cells leads to attenuated mitochondrial biogenesis and impaired adipogenesis. *Scientific reports*, 13(1), 22990.

Abrigo J, et al. (2023) Cholic and deoxycholic acids induce mitochondrial dysfunction, impaired biogenesis and autophagic flux in skeletal muscle cells. *Biological research*, 56(1), 30.

Tacchi F, et al. (2023) Bile Acids Alter the Autophagy and Mitogenesis in Skeletal Muscle Cells. *Advances in experimental medicine and biology*, 1408, 183.

Singh B, et al. (2022) Defective Mitochondrial Quality Control during Dengue Infection Contributes to Disease Pathogenesis. *Journal of virology*, 96(20), e0082822.

Larson-Casey JL, et al. (2021) Post-translational regulation of PGC-1 β modulates fibrotic repair. *FASEB journal : official publication of the Federation of American Societies for Experimental Biology*, 35(6), e21675.

Chen YT, et al. (2021) Embryonic exposure to hyper glucocorticoids suppresses brown fat development and thermogenesis via REDD1. *Science bulletin*, 66(5), 478.

Strong MD, et al. (2020) Role of zinc transporter ZIP12 in susceptibility-weighted brain magnetic resonance imaging (MRI) phenotypes and mitochondrial function. *FASEB journal : official publication of the Federation of American Societies for Experimental Biology*, 34(9), 10702.

Kim H, et al. (2020) Indoprofen prevents muscle wasting in aged mice through activation of PDK1/AKT pathway. *Journal of cachexia, sarcopenia and muscle*, 11(4), 1070.

He C, et al. (2019) NOX4 modulates macrophage phenotype and mitochondrial biogenesis in asbestosis. *JCI insight*, 4(16).

Zhou ZD, et al. (2019) The Therapeutic Implications of Tea Polyphenols Against Dopamine (DA) Neuron Degeneration in Parkinson's Disease (PD). *Cells*, 8(8).

- Bjune JI, et al. (2019) IRX5 regulates adipocyte amyloid precursor protein and mitochondrial respiration in obesity. *International journal of obesity* (2005), 43(11), 2151.
- Huang CL, et al. (2018) *Gastrodia elata* alleviates mutant huntingtin aggregation through mitochondrial function and biogenesis mediation. *Phytomedicine : international journal of phytotherapy and phytopharmacology*, 39, 75.
- van der Pluijm I, et al. (2018) Decreased mitochondrial respiration in aneurysmal aortas of Fibulin-4 mutant mice is linked to PGC1A regulation. *Cardiovascular research*, 114(13), 1776.
- Wang B, et al. (2018) Neonatal vitamin A injection promotes cattle muscle growth and increases oxidative muscle fibers. *Journal of animal science and biotechnology*, 9, 82.
- Mu X, et al. (2017) IGF-II-mediated downregulation of peroxisome proliferator-activated receptor- γ coactivator-1 α in myoblast cells involves PI3K/Akt/FoxO1 signaling pathway. *Molecular and cellular biochemistry*, 432(1-2), 199.
- Gallardo-Montejano VI, et al. (2016) Nuclear Perilipin 5 integrates lipid droplet lipolysis with PGC-1 α /SIRT1-dependent transcriptional regulation of mitochondrial function. *Nature communications*, 7, 12723.
- Robinson A, et al. (2014) Upregulation of PGC-1 α expression by Alzheimer's disease-associated pathway: presenilin 1/amyloid precursor protein (APP)/intracellular domain of APP. *Aging cell*, 13(2), 263.
- Zhang W, et al. (2014) Knockdown of MMP-7 inhibits cell proliferation and enhances sensitivity to 5-Fluorouracil and X-ray irradiation in colon cancer cells. *Clinical and experimental medicine*, 14(1), 99.