Resource Summary Report

Generated by RRID on Aug 25, 2026

PGC-1 alpha promoter luciferase delta CRE

RRID:Addgene_8888
Type: Plasmid

Proper Citation

RRID:Addgene_8888

Plasmid Information

URL: http://www.addgene.org/8888

Proper Citation: RRID:Addgene_8888

Insert Name: PGC-1 alpha promoter dCRE

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. Mutation of the CRE site between -146 and -129 from TGACGTCA to TAGATCTA. NOTE: The full sequence from the depositor is theoretical. There are several discrepancies between Addgene's quality control sequence and the full sequence provided here, but those discrepancies do not appear to affect function. Several labs have published successfully with this plasmid.

Plasmid Name: PGC-1 alpha promoter luciferase delta CRE

Relevant Mutation: Site-directed mutagenesis to remove the CREB binding site.

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 luciferase delta CRE.

No alerts have been found for PGC-1 alpha promoter luciferase delta CRE.

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We found 11 mentions in open access literature.

Listed below are recent publications. The full list is available at RRID .

Kim YM, et al. (2025) Skeletal muscle endothelial dysfunction through the activin A-PGC1 ? axis drives progression of cancer cachexia. Nature cancer, 6(8), 1350.

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.

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

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.

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.

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

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.

Aatsinki SM, et al. (2014) Metformin induces PGC-1? expression and selectively affects hepatic PGC-1? functions. British journal of pharmacology, 171(9), 2351.

Liu Z, et al. (2014) Ethanol suppresses PGC-1? expression by interfering with the cAMP-CREB pathway in neuronal cells. PloS one, 9(8), e104247.

Lira VA, et al. (2010) Nitric oxide and AMPK cooperatively regulate PGC-1 in skeletal muscle cells. The Journal of physiology, 588(Pt 18), 3551.

Chowanadisai W, et al. (2010) Pyrroloquinoline quinone stimulates mitochondrial biogenesis through cAMP response element-binding protein phosphorylation and

increased PGC-1alpha expression. The Journal of biological chemistry, 285(1), 142.