

Resource Summary Report

Generated by [NIF](#) on Sep 1, 2026

GW1CMV-Perceval

RRID:Addgene_21737

Type: Plasmid

Proper Citation

RRID:Addgene_21737

Plasmid Information

URL: <http://www.addgene.org/21737>

Proper Citation: RRID:Addgene_21737

Insert Name: Perceval (fluorescent ATP:ADP sensor)

Organism: Synthetic

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:19122669](#)

Vector Backbone Description: Backbone Marker:British Biotech; Backbone Size:5076; Vector Backbone:pGW1-CMV; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Plasmid Name: GW1CMV-Perceval

Relevant Mutation: improved Kozak sequence

Record Creation Time: 20220422T222056+0000

Record Last Update: 20260829T080208+0000

Ratings and Alerts

No rating or validation information has been found for GW1CMV-Perceval.

No alerts have been found for GW1CMV-Perceval.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 7 mentions in open access literature.

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

Acreman S, et al. (2024) The endoplasmic reticulum plays a key role in β -cell intracellular Ca^{2+} dynamics and glucose-regulated glucagon secretion in mouse islets. *iScience*, 27(5), 109665.

Socodato R, et al. (2023) RhoA balances microglial reactivity and survival during neuroinflammation. *Cell death & disease*, 14(10), 690.

Yang M, et al. (2021) Inhibition of mitochondrial function by metformin increases glucose uptake, glycolysis and GDF-15 release from intestinal cells. *Scientific reports*, 11(1), 2529.

Coomer CA, et al. (2020) Single-cell glycolytic activity regulates membrane tension and HIV-1 fusion. *PLoS pathogens*, 16(2), e1008359.

Knudsen JG, et al. (2019) Dysregulation of Glucagon Secretion by Hyperglycemia-Induced Sodium-Dependent Reduction of ATP Production. *Cell metabolism*, 29(2), 430.

Grimm A, et al. (2018) Local Oxidative Damage in the Soma and Dendrites Quarantines Neuronal Mitochondria at the Site of Insult. *iScience*, 6, 114.

Ofori JK, et al. (2017) Elevated miR-130a/miR130b/miR-152 expression reduces intracellular ATP levels in the pancreatic beta cell. *Scientific reports*, 7, 44986.