

Resource Summary Report

Generated by [RRID](#) on Aug 17, 2026

Pyronic/pcDNA3.1(-)

RRID:Addgene_51308

Type: Plasmid

Proper Citation

RRID:Addgene_51308

Plasmid Information

URL: <http://www.addgene.org/51308>

Proper Citation: RRID:Addgene_51308

Insert Name: Pyronic

Organism: Synthetic

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:24465702](#)

Vector Backbone Description: Backbone Marker:Invitrogen; Backbone Size:5419; Vector Backbone:pcDNA3.1(-); Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Plasmid Name: Pyronic/pcDNA3.1(-)

Record Creation Time: 20220422T222302+0000

Record Last Update: 20260815T081612+0000

Ratings and Alerts

No rating or validation information has been found for Pyronic/pcDNA3.1(-).

No alerts have been found for Pyronic/pcDNA3.1(-).

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 15 mentions in open access literature.

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

Huang Y, et al. (2026) Sequence-dependent splicing dysregulation drives therapy resistance in pediatric AML. *Cell reports. Medicine*, 7(1), 102542.

Rauseo D, et al. (2026) Mitochondrial lactate venting limits oxidative stress. *Cell metabolism*, 38(6), 1130.

Liu R, et al. (2025) Harmine promotes axon regeneration through enhancing glucose metabolism. *The Journal of biological chemistry*, 301(3), 108254.

Aburto C, et al. (2025) Acute stimulation of glucose metabolism by H₂O₂ sustains the NADPH steady-state under oxidative stress. *Redox biology*, 85, 103740.

Baeza-Lehnert F, et al. (2025) Two-point calibration protocol for the Förster Resonance Energy Transfer indicator Pyronic in neurons. *Neurophotonics*, 12(Suppl 2), S22807.

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

Pérez-Liébaña I, et al. (2022) A Ca²⁺-Dependent Mechanism Boosting Glycolysis and OXPHOS by Activating Aralar-Malate-Aspartate Shuttle, upon Neuronal Stimulation. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 42(19), 3879.

Gross D, et al. (2022) IKCa channels control breast cancer metabolism including AMPK-driven autophagy. *Cell death & disease*, 13(10), 902.

Koshenov Z, et al. (2022) Citrin mediated metabolic rewiring in response to altered basal subcellular Ca²⁺ homeostasis. *Communications biology*, 5(1), 76.

Díaz-García CM, et al. (2021) The distinct roles of calcium in rapid control of neuronal glycolysis and the tricarboxylic acid cycle. *eLife*, 10.

Martens MD, et al. (2020) Misoprostol attenuates neonatal cardiomyocyte proliferation through Bnip3, perinuclear calcium signaling, and inhibition of glycolysis. *Journal of molecular and cellular cardiology*, 146, 19.

Arce-Molina R, et al. (2020) A highly responsive pyruvate sensor reveals pathway-regulatory role of the mitochondrial pyruvate carrier MPC. *eLife*, 9.

Baeza-Lehnert F, et al. (2019) Non-Canonical Control of Neuronal Energy Status by the Na⁺ Pump. *Cell metabolism*, 29(3), 668.

Chow HM, et al. (2019) ATM is activated by ATP depletion and modulates mitochondrial function through NRF1. *The Journal of cell biology*, 218(3), 909.

Rusu V, et al. (2017) Type 2 Diabetes Variants Disrupt Function of SLC16A11 through Two Distinct Mechanisms. *Cell*, 170(1), 199.